

# DISTRIBUTION & WAREHOUSING

FORMERLY  
**TRANSFER & STORAGE**

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Vol. XIX, No. 10

U. S. C. Building, 237 W. 30th St.  
New York, N. Y.

October, 1920

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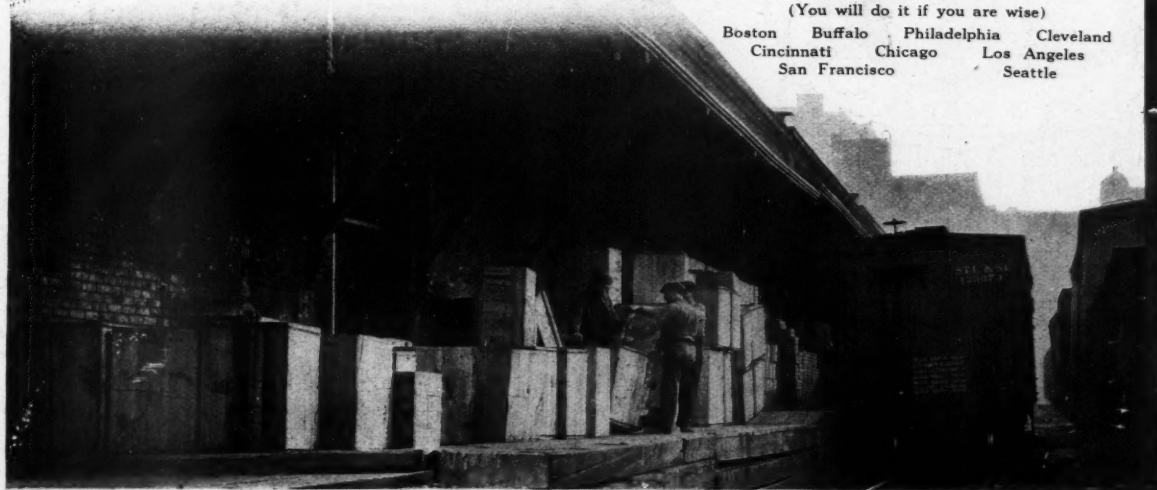
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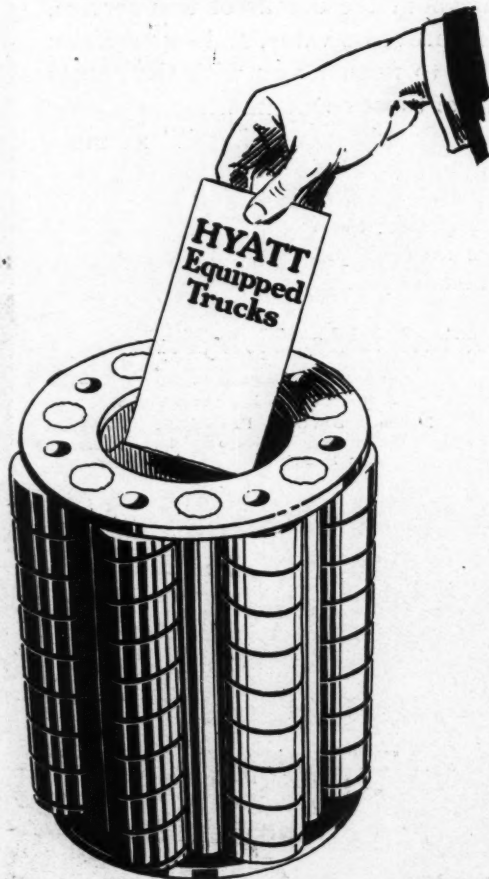
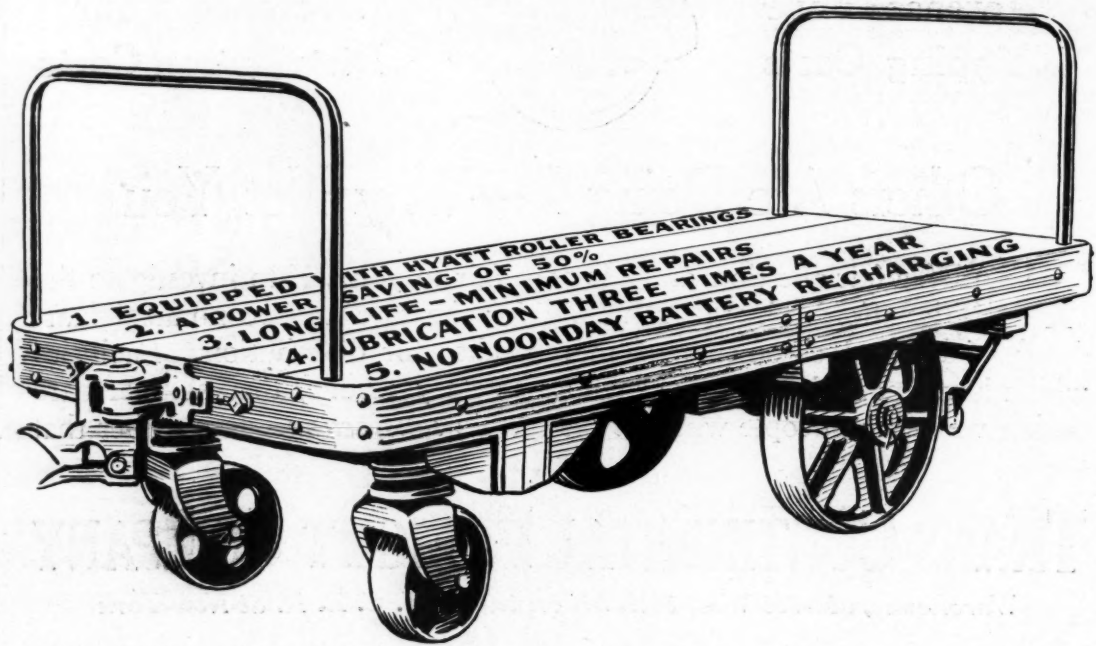
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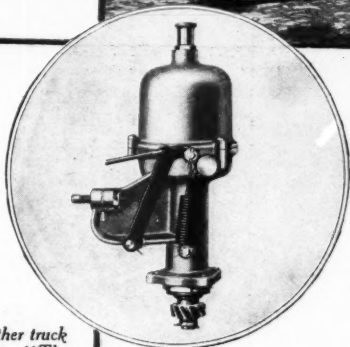
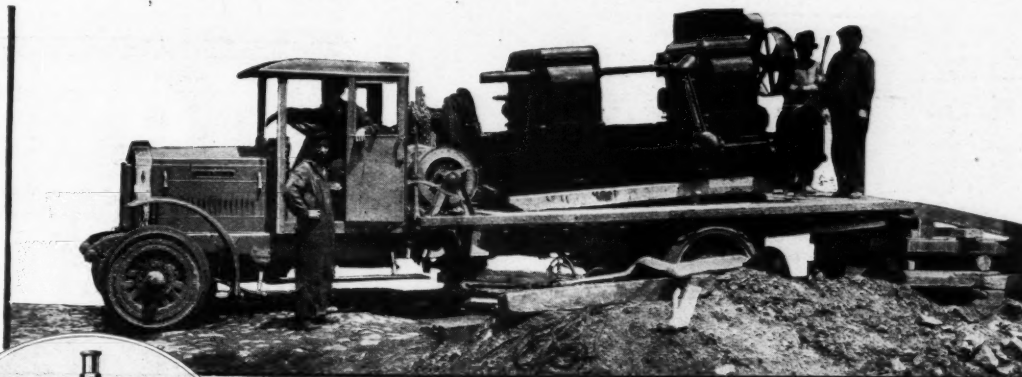
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Volume XIX

NEW YORK, OCTOBER, 1920

No. 10

## TELL YOUR BANKER

*That Financial Interests Are Planning to Put the Dollar  
Behind Construction of Warehouses in Cities Where  
Present Distribution Facilities Are Inadequate*

**E**CONOMY in the distribution of raw and finished products through the public merchandise warehouse is one of the objectives of the Warehouse Bond and Share Company, which has been organized by a group of capitalists to develop and expand the storage industry along lines of progress.

In publishing this month Colonel Elisha E. Garrison's first of a number of articles telling what this new warehousing and financing organization purposes to achieve, *Distribution & Warehousing* would convey this thought to every traffic manager and every warehouseman:

Tell your banker about it.

Financial executives, engineers, traffic and distribution experts, warehouse authorities, industrial specialists—all these have had a share in formulating plans for a project which, if successfully carried out, will stimulate the distribution of commodities, through public

storage plants, by hundreds of manufacturers who to-day do not route goods through warehouses.

With your banker you cannot go too deeply into your business affairs. Winning his confidence is essential to the success of your business. Banking interests are identified with the plans of the Warehouse Bond and Share Company, as set forth in the articles which Colonel Garrison is writing for *Distribution & Warehousing*. Your own banker will be keen to read to what extent, and why, these financial interests have determined to throw their support behind the new company. These articles will set forth that information. In this first one, Colonel Garrison remarks:

"The banker who does not serve, ceases to be a banker. If the country needs better distribution facilities, they can be provided in only one way. The banker, the organizing banker, must deal with the situation."

## The Warehouse Bond and Share Company

*A Statement of Its Plans to Finance the New Development  
of the Distribution Warehouse*

By Col. Elisha E. Garrison, President

**T**HE distribution warehouse is the answer to Mr. Hill and Mr. Cassatt in great measure. Had they realized this important fact

when they predicted the breakdown of the rail system under the strain of the distribution business of the country, there would now not be

the great opportunity which actually forces itself upon the wide-awake warehouseman, and upon the new institution now being con-

structed with the sole purpose of lending such warehousemen the financial support necessary to enable them to meet the demand and take advantage of the opportunity offered by the Warehouse Bond and Share Company.

Freight cars to-day are crawling about the country at a snail-like pace, stopping at way stations and standing on sidings. Less than carlot shipments are the cause. Warehouse distribution facilities with truck and trolley traffic to small centers will be the answer. The greatest possible increase in railroad rolling stock will be needed—is now needed—to provide for traffic to freight breaking and strategic distribution points. There is no conflict between the railroads and the sound expansion of other means of liquidizing transportation—accelerating the flow of commodities.

Railroad officials very generally recognize this situation, and many of them are co-operating with the movement. Their advice and assistance are cordially welcomed, and will lead to much broader plans of operation than would be possible otherwise. Another influential group which has grasped this problem and is grappling with the solution of it is made up of the traffic managers of many of the great producers and distributors of commodities. And why should they not do so? In these days of traffic congestion the traffic manager who fails to see the advantage, present or prospective, of soundly organized and operated distribution warehouse facilities at strategic points in the territory covered by his company's sales is hard to find.

#### Widespread Interest

An association has recently been formed by representative traffic men, the Shippers' Warehousing and Distributing Association, for the particular purpose of dealing with this great question. Bankers who, under the stimulus of the Federal Reserve System, are looking for sound paper eligible for rediscount; trucking companies organized for the quick short haul, retailers who want to get away from heavy freight and handling cost or excessive and unnecessary middle handling—these and many others are coming gradually to a full realization of the value to themselves and to the country of distribution through logically situated distributing warehouse plants.

The financing and operating plans of the Warehouse Bond and

Share Company have been formulated carefully, step by step, with the active assistance of engineers, warehouse experts, traffic experts, industrial specialists and finance experts and are capable of meeting

### THE DOLLAR AND THE WAREHOUSE

**I**T is the plan of the Warehouse Bond and Share Co. to finance the construction of warehouses in cities and towns where present-day lack of distribution facilities creates a natural demand for additional storage space. The railroad official, the manufacturer, the banker, the builder of motor trucks, the warehouseman—each will play his part in bringing this plan to maturity.

Bigger and better merchandise warehouses, adequately financed and successfully operated, would tend toward building a universal practice by producers of using public storage plants for moving goods forward. One result of this would be elimination of jobbers' profits. This in turn would cause a decline in the country's distributing costs, and the retailer and the ultimate consumer would be beneficiaries commensurate with the extent of that decline.

In the series of articles beginning in this issue of *Distribution & Warehousing* Colonel Garrison, president of the company, will explain in detail the various objectives. Future articles will enable the warehouseman who wants to build to know exactly what should be his method of procedure to obtain financial backing.

very great requirements without running the risk of incaution or over expansion.

Realizing from the first that the task was a very great and very important one no attempt to force the situation has been made and all the elements that could contribute to soundness and elasticity of issue have been carefully combined. It might be truthfully said that the Warehouse Bond and Share Company is designed to be a bank of issue to emit sound investment securities whose market shall be the whole investment field and whose basis shall be the reorganized

warehouse distribution industry.

The great size of the undertaking can be measured only by the mind that can grasp not alone the existing situation and conditions, but which is also capable of forming some concept of what the future has in store. The day is past when America can think of a Kansas wheat field as unrelated on the one hand to the wheat-buying power of certain foreign countries or the wheat-producing power of others. It is just as true that every factor in the smooth flow of commodities at home becomes an element in maintaining America's position and prestige among the nations. Our new banking laws enabled us to meet the financial conditions produced by the war. The inadequacy of our distribution facilities came dangerously near to demoralizing all our other efforts, and to-day the knife edge on which we are skimming along affords a terrifying advantage to any little group of agitators who favor the "grand cataclysm" and are trying to bring it about.

Any considerable interruption of traffic brings the people of the cities, large and small, face to face with starvation. Furthermore, cramped conditions in distribution make for profiteering in commodities and lead to wastage of products which are prevented from reaching the markets. In the last analysis it is the many who pay the excess; it is the people who do without. Therefore any substantial movement to amplify distribution facilities is a people's movement; the public should participate.

#### The Banker's Function

The banker's function, rightly understood, is primarily one of service. The banker who does not serve, ceases to be a banker. His service consists in organizing needed and desirable activities in such a way, with such financial support as he can give, that the public can safely and sanely use surplus earnings or income to improve its own condition. If the country needs better distribution facilities they can be provided in only one way. A vote of Congress will not do it, neither will publicity and discussion bring it about. The banker, the organizing banker, must deal with the situation. He must set up the project in such form that it will afford an attractive investment for the public's funds, and he must make ample provision against every conceivable chance of loss.

This is the function which the Warehouse Bond and Share Com-



pany is organized to render in connection with the much needed development of one great factor in our backward and inadequate distribution, storage and salvage system. Its service will consist in opening a way whereby the peoples surplus can be used to earn honest income and reduce the costs of getting what the public needs and wants, at one and the same time. This function will be performed by the creation of a standard type of warehouse security based upon uniform and conservatively set up mortgages and preferred stocks of carefully selected and actually needed projects, and behind each issue of which there will be the security of all the projects financed as well as their surplus earning power. The capital of the Warehouse Bond and Share Company and its earnings, both direct and collateral, will be additional guarantees and safeguards behind these standardized broad market obligations.

#### Careful Selection

But this is not all. The banker must take certain careful measures of precaution and provide for continuous progressive soundness of policy and operation after the project has been created. In this connection the following points are of interest: The field of operation is large and varied. From the \$200,000 project needed in a small

center surrounded by twenty or thirty towns and villages accessible by truck and trolley to the \$40,000,000 port terminal and warehouse to provide for a nation's commerce the range is very great and the number of projects runs into the thousands. This means that careful selection is possible. This selection will be based upon many considerations of both local and general character. The selection having been made the engineering work must be of the highest quality and based upon successful experience. The Moores & Dunford Engineering Corporation is the first selected to act as consulting engineers because of just such experience. Their recommendations will have great weight in such decisions. A corps of experts will be maintained whose assistance both in getting, handling and financing the business will be invaluable and in linking up activities which will help to swell the profits by multiplying the services. From the standpoint of Warehouse Bond and Share securities every means will be employed to preserve their market position, which will, of course, react favorably upon the commercial and banking credit of the whole industry, but particularly so in the case of enterprises financed and erected under this system. The placing of the obligations of all such enterprises behind the offerings of the company will

give great diversity of security and will in turn link up all such activities for mutual advantage in many ways. Finally, the establishment of these relations secures to the investor a certain and steady betterment of his holdings and to the warehouseman the means of expansion as expansion is required without the complication, uncertainty and often heavy costs of dealing with new and inexperienced people.

A steady campaign among distributors of commodities will be inaugurated to keep them posted as to the new or increased facilities provided at any given point, and to extend their information regarding the value of all such points as distribution and carrying centers.

#### Summary

The Warehouse Bond and Share Company is the product of existing conditions. Its reason for being is plain. It occupies a unique field in that its activities have a positive money saving value to all interests, but most of all to the public whose advantage will be the better served in direct proportion to the success and prosperity of this new banking enterprise; for as the distribution, salvage and storage power of the warehouseman is strengthened and amplified, just in such proportion will commodities reach the public more regularly, more surely and with a minimum of unnecessary intermediate handling costs.

## SAN FRANCISCO PLANS BIG WAREHOUSE SYSTEM

State Officials Approve \$2,500,000 Project Which Will Include Multiple-Story Structure

SAN FRANCISCO, Sept. 2.—One of the greatest port warehouse developments in the history of the American storage industry is being planned for San Francisco with the approval of the Board of State Harbor Commissioners. Shipping, rail and warehouse facilities will be coordinated at the waterfront at an expenditure of approximately \$2,500,000, and cargoes and trainloads of freight would then be handled at minimum cost for both domestic and import and export movement. Six large docks will be constructed with a total area of 600,000 square feet, and there will be storage capacity for 40,000 tons of freight within the seawall. It is expected the project will be put under way within two months.

#### Ample Trackage

With docking space of 990 linear feet, a warehouse 816 feet long will be built, of six multiple stories, this building to be combined with a wharf shed. Ample trackage will be supplied, and electrical revolving cranes and whip hoists will

move goods from ship to warehouse floors.

"The project is superior to anything in the United States," according to John H. McCallum, president of the Board. "It means not only tremendous increase in cargo and dock space but establishes a port warehousing system which when completed will rival anything in any port in the world."

#### Landing Platforms

The width of the main floor of the warehouse will be 123 feet, of the second floor 110 feet and of the four floors above each 100 feet. These widths are obtained by stepping back on the wharf side, and this plan was adopted in order to locate the foundations of the wall of the main building inside the bulkhead wall. By this means are provided landing platforms at the levels of the second and third floors, and the material handling machinery will enable transferral of goods to the first, second and third floors in single operations.

As outlined by Frank G. Ehite, chief engineer, in plans submitted to the

Board, the first floor of the warehouse will have 100,270 square feet, the second floor 89,760 and the third, fourth, fifth and sixth floors each 81,600.

#### The Improvements

This will be the first multiple-story warehouse on the Pacific Coast, if not in the United States, located adjacent to deep water and with a berth permitting the docking of ocean-going steamships.

Improvements that will be made comprise a sea wall extending from Third street, near the northerly end of the Channel street bridge to the Embarcadero, adjacent to pier 46, and along the Embarcadero to connect with the existing sea wall; reclamation of the property inside the sea wall by filling with dredged material; a reinforced concrete wharf over the outer slope of the sea wall from Third street to pier 46; a combination wharf shed and warehouse of reinforced concrete facing the wharf; belt railroad tracks on the wharf and behind the warehouse, and such other tracks as may be necessary adequately to serve the property.



## Shippers' Committee on

# STANDARDIZATION OF FORMS

**Plans Conferences with Officers of Warehousemen's Associations. Purposes of Traffic Managers in Organizing are Set Forth in Statement Issued by John Simon—Aggressive Membership Campaign to be Carried On.**

By KENT B. STILES

CHICAGO, Sept. 3.

**C**ONSTRUCTIVE headway in the laborious task undertaken by the Committee on Standardization and Simplification of Forms was reported by that committee at the first meeting of the directors of the Shippers' Warehousing and Distributing Association, held to-day in the Board room of the American Sugar Refining Co.

The initial effort at standardization relates to the warehousing form used by the storage executive to notify the shipper of the arrival of goods.

A tentatively standardized form was presented by the committee and discussed. This will be subjected to some revisions and additions. In due time officers of the American Warehousemen's Association and American Chain of Warehouses will be invited to attend a conference with the shippers' committee, and no attempt will be made before then to decide upon any finality of form to be recommended universally for use in the business relationship between warehouseman and manufacturer.

Aside from the report of the committee, the chief business at the meeting here was the preparation of a statement by John Simon, president of the shippers' organization, setting forth in somewhat more detail than heretofore the exact purposes of forming the Shippers' Warehousing and Distributing Association. As warehousemen and distributors know, there has been hostility on the part of some men in the storage industry toward the new body, these opponents believing the shippers had ulterior purposes, including

rate-cutting in warehouses. This is denied by the officers of the association and every effort is being made to counteract the impression.

The statement prepared by Mr. Simon, who is manager of the transfer department of the Keystone Steel & Wire Co., Peoria, Ill., was approved by the directors. Perhaps its outstanding feature, from the warehouseman's viewpoint, was the assertion that one of the purposes of the Association is "to impress upon manufacturers, jobbers and merchants the value of using public warehouses as a medium through which to distribute their products."

There is a two-fold significance in this clause. First, propaganda along that line by the shippers' body should tend toward building bigger distribution business for warehousemen, by attracting into this field a great number of manufacturers who to-day do not route goods through storage plants. Second, the clause should help to eliminate the impression held by some warehousemen that the Shippers' Warehousing and Distributing Association was formed in part with the idea of establishing co-operative warehouses in territories where the traffic managers might consider storage rates too steep.

The directors voted to-day to conduct an aggressive publicity and membership campaign, concentrating at first on manufacturers of nationally known products. The objectives of the Association will be stated in advertisements to be inserted in business papers, and the support of Chambers of Commerce and other civic organizations will be solicited.

**T**HE difficulty in standardizing a form for warehousemen to report receipt of goods may be understood when it is stated that about seventy different forms were received by the standardization committee from as many different warehouses. They varied in size from 32 by 20 inches to a few inches square. Few of the texts were the same, and all colors of paper were used. It was the feeling of the committee that the economical feature alone, of having a standardized form,

should appeal to the warehouse industry. Opinion was expressed also that in the long run the shippers would be compelled to concede a great deal more than the warehousemen will be called upon to do, if a common meeting point is to be arrived at.

One of the additions suggested to the form tentatively prepared would be the incorporation of overage and shortage into any form finally agreed upon.

The committee's report was sub-

mitted by the chairman, John Wilson, manager, western division of the Hygienic Products Co., Canton, Ohio, and Chicago. Associated with Mr. Wilson in this work are: E. G. Hamel, traffic manager, Jiffy Dessert Co., Waukesha, Wis.; R. Hartle, traffic representative, Air Reduction Sales Co., Chicago; I. L. Colborn, cereal traffic department, Armour Grain Co., and P. T. MacKie, district freight agent, American Sugar Refining Co., Chicago. The committee's report reads:

"Your Committee on Standardization and Simplification of Forms has met every week since the association was organized.

"The multitudinous variety of forms and documents received from about seventy warehouses made the task of your committee one of great magnitude, and it was necessary to exercise great care in analyzing the various forms with a view to adopting one which would briefly and explicitly state all necessary information and at the same time eliminate the need, or seeming need, of a number of reports, imparting information which should be embodied in one.

"A suggested form is herewith attached, and in the opinion of your committee when completed should supplant all present forms and systems.

"No decision has been reached as to the exemptions from responsibility claimed by public warehousemen for damage by rats, etc., and from attached list it is evident that with so many varied opinions it has been deemed necessary to allow this feature to remain in abeyance pending responses from Messrs. Lovejoy, Smith, Cassidy and Spencer, who have been written on the subject.

#### To Seek Co-operation

"A call will be issued shortly for a joint meeting of the secretary of the American Warehousemen's Association and the American Chain of Warehouses to meet with your committee, when this form and other matters will be discussed pertaining to a harmonious feeling between the various associations interested in the warehousing of commercial merchandise."

The warehousemen alluded to in the committee's statement are George S. Lovejoy, vice-president of the American Warehousemen's Association and manager of the general store department of the Quincy Market Cold Storage & Warehouse Co., Boston; Sydney A. Smith, vice-president of the Central Warehousemen's Club, secretary of the Illinois Warehousemen's Association and manager of the Currier-Lee Warehouse Co., Chicago; P. F. Cassidy, western representative of the American Chain of Warehouses, and Robert L. Spencer, manager of the Duquesne Warehouse Co., Pittsburgh. All these men attended the meeting at which the shippers' body was organized at Chicago in June, Mr. Spencer as the official representative of the American Warehousemen's Association. The standardization committee has been holding consultations with Mr. Smith and Mr. Cassidy.

**T**HE statement issued by Mr. Simon to the warehouse industry regarding purposes will be used in part

as the basis for the statement which the directors plan to circulate among Chambers of Commerce. Other essential thoughts were submitted by directors individually and these will be utilized in the membership campaign. Mr. Simon's statement follows:

"The right kind of an organization offers definite goals, through *co-operation*, which no one individual can hope to accomplish.

"It is with this purpose in mind that the Shippers' Warehousing and Distributing Association has been formed.

#### Purposes

"Close observation, coupled with considerable experience, has convinced me that practically all of the failures of any organization have occurred because at the bottom the plans were not honestly devised nor equitably worked out.

"In nine cases out of ten, at some point or other, in the practical application of the plans that have failed the fact has developed that they were not mutually beneficial.

"No organization can hope to be successful that has for its purpose any motive that will serve to undermine or in any way to knock the other fellow.

"Let us, therefore, deal with each other in an absolutely honest, open and broadminded spirit.

"The purposes of the Shippers' Warehousing and Distributing Association are:

"1. To co-operate jointly with the warehouseman.

"2. To bring about a more friendly feeling between warehouseman and shipper.

"3. To impress upon manufacturers, jobbers and merchants the value of using public warehouses as a medium through which to distribute their products.

"4. To standardize and minimize forms, shipping notices, etc.

"5. To standardize practices and shipping instructions.

"6. To meet jointly with committees representing the American Warehousemen's Association and other merchandise warehousing organizations."

#### As to Membership

**A**S a preliminary move in the membership campaign, the chairmanship of the membership committee was assigned to C. P. Thomson, assistant traffic manager of the Furniture Manufacturers' Association of Grand Rapids. Application for membership as received by the association's secretary will be sent forward to Mr. Thomson, and the committee will accept or reject on its own initiative without first submitting an applicant's name to the directors as originally planned. This removes delay in decision.

#### Two New Members

At the meeting to-day the Central Oil & Gas Co., Gardner, Mass. (H. D. Burnham, traffic manager), and the De Laval Separator Co., Chicago (J. D. Hollowell, general manager), were elected members. It was brought out that the combined membership handles accounts through approximately 400 merchandise warehouses.

The immediate aim of the men who will conduct the membership campaign is a membership of 1000. Committee members and directors will undertake personal solicitation among prospective manufacturers in the districts where they reside.

W. B. Everest, general traffic manager of the Westinghouse Electric & Manufacturing Co., East Pittsburgh, Pa., and V. O. Dodge, traffic manager of O. & W. Thum Co., Grand Rapids, Mich., were elected a finance committee.

Present at the meeting to-day were Mr. Simon, Mr. Everest, Mr. MacKie, Mr. Dodge, Mr. Wilson and F. D. Campau, general counsel, who is general counsel also for the Furniture Manufacturers' Association of Grand Rapids; Eugene Wallace, traffic manager of the Kellogg Toasted Corn Flake Co., Battle Creek, Mich., and Kent B. Stiles, secretary, who is editor of *Distribution and Warehousing*.

#### Rock Island Co. to Build

ROCK ISLAND, ILL., Sept. 27—The Rock Island Transfer and Storage Co. has been granted certificate of convenience and necessity by the State Public Utilities Commission for erection of warehouse at First Avenue and Seventeenth Street.

B. L. Burke, president, announces that a concrete building, 75 by 130 feet, five stories and basement, will be constructed at an estimated cost of \$90,000. The foundations will be strengthened for additions.

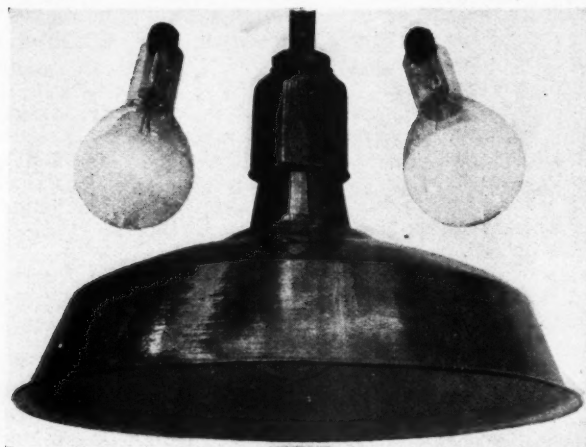
#### Idaho Warehousemen Want Higher Rates

LEWISTON, IDAHO, Sept. 7—Idaho warehousemen have presented testimony to the State Public Utilities Commission to the effect that advances in rates are necessary to meet operating expenses. The storage executives asserted that these costs are 20 per cent higher than those of last year.

#### New York Truckmen Organize

NEW YORK, Sept. 28—Representatives of about 75 firms and individuals engaged in freight transportation and trucking here organized to-day what will be known as the Merchant Truckmen's Bureau. General improvement of trucking conditions in the metropolitan district is one of the objectives.

# How to Install Proper Lighting In the Warehouse



*The RLM standard dome reflector which is most highly recommended by the General Electric Co. for industrial lighting in warehouses. Note simplicity of construction and consequent adaptability to cleaning. The Mazda C lamps at either side are bowl-frosted and bowl-enameled, for eliminating the glare; it is usually advisable to employ lamps of this type in connection with the RLM standard dome reflector*

By W. H. Rademacher,  
Edison Lamp Works, General Electric Company.

**T**HE warehouse to-day is one of the most vitally important links in the chain between the producer and the consumer. But few products are used at their point of production whereas many are stored at some stage in their progress from the center of manufacture to that of ultimate consumption, this being especially true in the case of export shipments which are fast growing to be an important part of our national commerce. Warehousing then has an important bearing on the questions of production and prosperity, both from a standpoint of speed and cost, and any agency which will facilitate handling should prove a welcome adjunct to the warehouse man.

A much neglected but highly satisfactory method within the reach of all is in the effective application of good lighting. Adequate illumination facilitates the movement of material, and, therefore, indirectly increases and expedites production through causes which may be briefly summed up as follows:

- a. Greater actual speed of trucking, etc.
  - b. Easy discernment of markings.
- The indirect effects are:
- c. Reduction in cost.
  - d. Fewer misconsigned shipments.
  - e. Reduction of spoilage and theft.
  - f. Improved relations with public.

These statements are based on facts derived from observations made in actual practice and are not theoretical or imaginary.

## Shadows vs. Clear Vision

If a warehouse is dimly lighted, many portions being in deep shadows, workers must proceed cautiously, watching out for objects lying about the floors, for they lack the confidence which comes with clear vision. Accident statistics compiled by reliable investigators reveal that one of the commonest causes is stumbling or falling, often resulting in fatal injury. Not only does an accident affect the worker involved but it further has a demoralizing effect on the entire force, each workman becoming over-cautious

and slowing down his movements. Proper lighting, therefore, increases the handling speed.

In sorting and selecting merchandise for storage and re-shipment, it is usually necessary to read and check labels or markings. It is self-evident that with plenty of light less time will be spent in these operations. In many buildings the light distribution is so poor that there are only a few spots where there is sufficient illumination to read markings and as a consequence the material must actually be moved there for examination. Such transfers as this are obviously costly, inefficient and far from being desirable.

## Danger of Misconsignment

One of the most serious difficulties encountered in the distribution of material is that of misconsignment to which inadequate illumination is an important contributing cause. The chances for error under poor light are great. Packages sent to the wrong place sometimes never return. Perishable freight is often entirely lost if missent. Occasionally an entire factory is held up awaiting the arrival of goods, the delay in transportation being due to a missent shipment. Beyond the delay and cost in locating missent material there follows a further load on the transportation system of sending it to the proper destination.

Spoilage of goods is reduced if there are no dark corners in which packages of perishable material may become hidden. Boxes that have been broken in shipment are readily caught and taken care of before a greater loss is sustained. Breakage is bound to be reduced for employees will not throw articles about if the place is well enough lighted so that they are likely to be seen. Theft is minimized as the sneak thief would not dare to pry open a bundle and remove part of the goods if the chances of detection were high.

Much business to-day is secured and held through the rendering of service. It is, or should be, the desire of every warehouse man to have the most cordial relations with his customers. If prompt deliveries of goods in undamaged condition are effected and if missent shipments are elimin-



ated, then the good-will of the customer as well as his future business is practically assured.

Good illumination has an important bearing on cleanliness. If low intensities and dark areas exist there is a tendency to dispose of refuse by casting it where the visibility is low. Such matter is likely to be overlooked even where periodic cleanings are instituted and unsanitary conditions, which are most detrimental, will exist. The psychological effects of cleanliness and bright surroundings, together with safety upon the workers, are also worthy of consideration. Cheerfulness and wide-awakeness, the states under which maximum effort is expended with minimum conscious application, are promoted by safe, clean, bright environments.

Up to within a comparatively few years ago the commonest method of lighting warehouses was by means of oil and flame gas lamps. These illuminants even when at their best were inefficient, inconvenient, dirty and dangerous from the standpoint of fire risk. To-day the standard of illumination in the industrial world is the incandescent electric lamp, particularly in its most modern and efficient form, the Mazda lamp. It is a clean, safe, highly efficient, comparatively cheap illuminant, easily installed, cleaned and replaced, readily controlled:—in a word, the best and latest in the art of effective and successful lighting.

However, the high state of perfection of present day illuminants does not mean that they can be used indiscriminately for the procurement of satisfactory lighting. Good illumination depends upon a number of factors, the principal ones being choice of proper reflectors and lamps, number and location of units, type of system employed and the color of walls and ceiling.

Sufficient light should be provided to permit the ready identification of markings, labels, etc., without eyestrain and to enable the worker to find his way about the entire area without effort. This latter requirement calls for good light distribution.

### "Safety First"

"Safety First" has become a common slogan, but some do not appreciate that of the many factors entering into its interpretation the question of lighting is one of the foremost. A minimum of one-half foot-candle\* is desirable in all parts of the warehouse. With this intensity average print can be read for a short period with reasonable ease. For good results an average intensity of at least one foot-candle is recommended.

The Illuminating Engineering Society's code of lighting for factories and mills and other work places which has

\*The foot-candle is the measure of the amount of light falling on object and is a standard arbitrary unit. It can readily be measured by a simple inexpensive instrument called a "foot-candle meter." It is as easy to read the foot-candle on the work as it is to read the temperature in a room by means of a thermometer.

been adopted as mandatory in a number of states provides a minimum intensity of one-quarter foot-candle for passageways, aisles, storage spaces, etc. This value takes care of the safety element alone, however, and is not intended to represent the most economical intensity, the code itself recommending that a higher intensity be provided.

### Eradicate All Glare

Bare or improperly shaded light sources within the range of vision defeat their purpose, constitute a risk, are inefficient and positively have no place in a modern and efficient lighting installation.

A lighting unit so placed produces glare, a condition inducing eye-fatigue and making it impossible for the workman depending upon the illumination to perform his duties comfortably and to the best of his ability. The human eye tends to adapt itself to the intensity of light which it views. If a workman looks at a bare lamp his eye automatically adjusts itself accordingly, not instantly, but slowly. If he looks away from the light source to surroundings which must obviously be of lower intensity, his eye cannot immediately readapt itself and he is temporarily blinded and unable to see. It is obvious that under such a circumstance serious consequences are likely to ensue as an accident through stumbling or falling, this being unavoidable on the part of the workman. The moral from this is self-evident and it

### Your Illumination

*Is it ample? It should be sufficient to avoid misrouting, breakage, theft.*

1. **Your lamps—**  
Are they properly spaced?  
Obstructions, character of surroundings, size of bays—these should be considered.
2. **Your reflectors—**  
Are they glass?  
They should be steel.
3. **Your voltage rating—**  
Does it correspond with the circuit rating?  
Care must be exercised that it does.
4. **Your walls—**  
Are they glossy?  
They should have a pure white finish with a flat or mat surface.
5. **Your workmen's eyesight—**  
Are you protecting it?  
To avoid accidents and to reduce labor inefficiency, you should.

follows that glaring light sources are to be avoided. Furthermore, the eye in repeatedly refocusing tires its muscles, and continuance of this exertion will eventually lead to serious impairment of the vision.

In addition to the physical discomfort produced by lamps so used it should be noted that the generated light is not being effectively and efficiently used.

The filaments of the present day lamp have a definite form which is dictated by various features which we will not attempt to discuss in this article. However, it has been the aim of the lamp engineer to design the lamp and its constituent parts so that it will be most efficient and usable from both a practical and engineering standpoint. The lamp filament emits light in all directions so that when unshaded a goodly portion of the light energy which it generates is sent over areas where it accomplishes no useful purpose. Both theory and practice demonstrate that a given area can be adequately lighted with from 25 to 50 per cent less power if lamps are equipped with efficient reflectors, or other than used bare. All of this leads to the natural conclusion that a lamp should always be used in conjunction with a reflector which will shield the eye from glare and which will properly control and distribute the light rays.

It is generally recognized that for warehouse lighting the best adapted type of reflector is that which will give the maximum of illumination with the least expenditure of energy. An open type reflector is, therefore, most com-

Night View



*Well-illuminated warehouse of modern construction. Here, one 200-watt Mazda C lamp in an RLM standard dome enamel reflector, placed close to the fifteen-foot ceiling, is used in each twenty-foot bay*

Day View



*Typical modern warehouse where material is piled high. Bays are 20 by 20 feet each, provided with two outlets. Sixty-watt Mazda lamps in deep bowl aluminum-finished reflectors are mounted close to 13-foot ceiling*

monly utilized. Added features which should receive due consideration in the choice of a reflector are—neatness, durability, ease of installation and maintenance.

Glass reflectors in general are undesirable for warehouse lighting on account of the likelihood of their being broken. The class of labor usually employed in warehouses applies none too gentle methods and in carrying long pieces such as pipes, poles, etc., the likelihood of coming in contact with the units, thereby resulting in breakage, is very great.

An efficient steel reflector is generally the solution. As a result of the combined efforts of lamp and reflector manufacturers there has been placed on the market a standardized form of dome type, porcelain enameled steel reflector, which is designated as the R L M Standard Dome. This reflector is designed along scientific lines, is very efficient and readily cleaned, rugged in construction and gives a wide spread of light, thereby permitting comparatively wide spacing without producing intervening dark areas. It is highly recommended for industrial uses such as warehouse lighting, although it should also be understood that there are many other types of reflectors on the market which are quite satisfactory.

#### Eliminate Dust

The accumulation of dust on a reflector has a great bearing upon its efficiency. Dark surfaces absorb considerably more light than bright ones, so that when a reflector surface becomes dirty considerable light is absorbed by it which might otherwise be usefully expended. Periodic cleanings of these parts should be undertaken if it is desired to maintain the efficiency of the system.

The walls and ceilings of a room are in reality secondary light sources as they re-direct some of the light which is thrown upon them from the lighting units. Their color, therefore, has an important bearing upon the efficiency of light utilization, for dark or dirty walls and ceilings, similar to dirty reflectors, absorb a large portion of the light received upon them. It follows that a pure white finish with a flat or mat surface is to be preferred. Glossy surfaces reflect images of the lamp filament introducing glare and eye-fatigue and are, therefore, to be avoided. A thin coating of paint through which the dark under-surface may be seen is not satisfactory for, under this

condition, the light gets through the surface and is absorbed. Good painting is to be strongly advocated and for guidance the following treatment, for application to plaster surfaces, which is flat, washable, permanent and conducive of the high, practical, reflective and diffusive powers is presented.

First coat—Good impervious surfacer.

Second coat—Straight lithophone paint.

Third coat—Gloss enamel and lithopone mixed in equal parts.

Fourth coat—Flat enamel, magnesium bearing flowed on.

The Mazda lamp is offered at the present time in two general forms, the "B" or vacuum and the "C" or gas-filled lamp is made only in ratings above fifty watts as below this size the vacuum lamp is the most efficient. The gas-filling of the larger size of lamps enables them to be operated at a higher temperature resulting in a greater light output for a given consumption of energy than is the case with the vacuum lamp.

As previously pointed out every effort should be made to eliminate glare from the light sources. It is not always possible to dictate the exact placement of the units with reference to the work and even when most advantageously located there is usually some position from which the bare light sources may be viewed. In such cases it is necessary to provide some means of diffusing the light. Recognizing the importance of this problem the MAZDA lamp in addition to being manufactured with a clear glass bulb is offered with bowl frosted, all frosted and bowl enameled finishes, the purpose of the bowl treatment being to increase diffusion.

#### Bowl Enamel Finish

The bowl enameled finish is the latest development and is most highly satisfactory for industrial use. The resultant illumination as given by lamps so treated is characterized by the softness of shadow and an avoidance of direct and reflecting glare, which is unobtainable from either clear or bowl-frosted lamps used in open reflectors. In the clear bulb lamp, the amount of upward and downward light is practically the same, so that when used in an open reflector, a large amount of the illumination



comes directly from the concentrated lamp filament.

Shadows, therefore, are comparatively sharp and reflected glare is likely to become a serious element. Bowl-frosting partially diffuses the downward light from the filaments but directs upward only a very small portion of the light. Bowl-enameling, on the other hand, not only diffuses the downward light, so as to make the bowl of the lamp of even brightness, but what is very important serves to re-direct a high proportion of the light from the filament against the reflector, thereby, producing a pleasing even brightness in it. Under these circumstances, the brightness of the lamp itself is much reduced, and the reflector becomes the principal source of light. The larger source of light has the direct effect of minimizing both direct and reflected glare and softening shadows.

The enameling as applied to Mazda lamps will not chip crack or discolor and can be washed without its finish being affected. Further, because of the smooth surface which it presents cleaning is a very simple matter. It has a special advantage over the bowl frosted finish in that dirt and foreign material collecting on the white surface is more readily perceived than when on the etched surface of the bowl frosted lamp, and is more likely to receive the attention to which it is entitled.

### Selecting Lamps

There seems to be somewhat of a hesitancy on the part of the uninitiated in adopting the diffusing bulb lamps even where their desirability is of unquestionable value. This state apparently is due to the erroneous impression that a high percentage of the light is absorbed in its passage through the bulb. Although there is a slight reduction in light output, approximately two and a half per cent in the case of the bowl frosted and eight per cent in the case of the bowl enameled and all frosted lamps, the gain in ability to see more clearly and without discomfort more than offsets the slight loss of light produced. Where the average industrial reflector is used there is little to be gained from the use of an all frosted lamp and this type of bulb is recommended only where the lamp is to be used bare.

These lamps are all manufactured in a wide assortment of ratings, so that little difficulty need to be anticipated in securing the proper unit for producing a predetermined intensity.

In purchasing lamps care should be taken that they are of the same voltage rating as that of the circuit on which they are to be operated. If lamps of a rated voltage, lower than that of the circuit, are chosen they will burn with a brilliancy somewhat above normal, but at the sacrifice of the lamps' life which will more than offset the value of the added illumination secured. Conversely, if the lamp is operated on a lower voltage than that at which it is rated its candle-power output will be reduced and its efficiency will be much poorer, while its life will be but slightly longer.

As a general rule the large lamps are more efficient and cost less per unit of illumination than small lamps. Also the fewer the number of outlets the less the cost of wiring

and maintenance. On the other hand, in designing an installation a consideration of this feature alone may make the lighting practically worthless. For an example, consider an area of 4000 square feet is to be lighted. If  $\frac{1}{4}$  watt per square foot is provided, 1,000 watts are needed. For ordinary ceiling height one 1,000 watt lamp would certainly not be the size to employ, the reason being perfectly obvious.

The size of lamp is controlled primarily by the ceiling height. In other words, lamps hung twenty feet above the floor on 20-foot centers give the same result as lamps ten feet above the floor on ten-foot centers. All other things being equal, a 400 watt lamp, twenty feet high would be as effective from an illuminating standpoint as four 100 watt lamps ten feet high.

### Light Diffusion

Other items to be considered are first: obstructions of various sorts. If material is piled high or if there is much piping, cross-beams, etc., it is obvious that dense shadows would be caused by large lamps widely spaced, which could be avoided by using small lamps spaced more closely together. Second: character of ceiling, walls and general surroundings. If these are light in color, reflecting well, then considerable diffused light is introduced in the illumination. This eliminates shadows and permits wider spacing. Third: the size of the bay. The total floor area is usually divided into bays by posts of columns and to install outlets symmetrically with respect to the bays is usually desirable. This, of course, has a determining effect on the spacing, hence, on the size of lamps to be used. This practice is extremely important in warehouses where material is piled or stored in reference to the arrangement of posts.

The following general rules on maximum desirable spacing apply:

Ceiling 10 ft. or less, 16 ft.

Ceiling 10 to 15 ft., 20 ft.

Ceiling above 15 ft., 30 ft.

It should be clearly understood that these figures are given in a general sense only and are subject to more or less variation, depending upon the manner in which materials are to be stored. For long narrow rooms, less than thirty feet or approximately one bay wide, one central row of outlets will serve the purpose well. 75 watt, Mazda "C" lamps in enamel dome reflectors on 15-foot centers would be a typical installation for a room with a 10-foot ceiling, whereas 100-watt units on 20-foot centers could be used if the ceiling were 15 feet high.

If the room is wider it is well to space outlets symmetrically in the bays. For example, a warehouse from forty to sixty feet wide should have two rows of lighting units, while one over sixty feet will probably require three rows.

With ceilings averaging fifteen feet, one outlet in the center of each 20 feet standard bay is excellent practice. Where material is piled almost to the ceiling it is necessary to localize units with reference to aisles.

## IN FUTURE ISSUES

### *of Distribution & Warehousing*

Will Appear Articles Covering Live Subjects in the Warehouse Industry, including Cost Accounting, Forms, Fire Hazards, Construction Costs, Financing, Freight Rate Knowledge, Distribution, Motor Trucks, Labor Saving Machinery.



*Begin To-day the Campaign for*

# SNOW REMOVAL

*October Is the Time to Make Plans to Keep the  
Motor Trucks Moving in Winter*

By JOSEPH HUSSON,  
Editor, *The Commercial Vehicle*.

**W**HEN snow is not removed from city streets and main trunk highways, the public pays the bill. This condition has held true ever since we have had vehicular street transportation. And it will continue to exist until we acknowledge that snow removal is a real problem and attack it in a businesslike manner.

New York's vehicular paralysis during 12 days of February, 1920, meant an economic business loss of \$60,000,000.

**I**F our streets and highways are to be 100 per cent efficient, it is essential that the traffic be not obstructed by snow.

Mail, parcel post, express service and general business delivery of all kinds are as important in winter as in summer.

The transportation of coal and other fuel is more important in winter than in summer. It is as essential to have our streets and main highways free from snow as it is for railroad tracks to be cleared of snow.

The seriousness of the snow removal problem is perhaps greater this year than ever before because of the condition of our railroads and street railways, which have placed upon the motor truck a greater transportation burden than ever before. Last winter hundreds of millions of dollars were wasted because vehicular transportation could not, on account of lack of snow removal, properly perform the task imposed upon it. Is this waste to go on year after year?

If not, what are we going to do about it?

The first requisite is a public realization of the problem and that snow can be removed and money saved by removing it.

Lack of proper snow removal

This eventually became a tax of \$10 on every man, woman and child in the city.

Figuring conservatively, the nation's business loss due to the snow invasion of last winter was at least \$500,000,000.

Last winter, it is true, was unusually severe. Yet who can say that conditions this winter will not be equally as bad?

Are you going to allow this tremendous waste to go on unchecked, year after year?

## SNOW REMOVAL

**T**ALK about it—now, not next winter—to your municipal and State Legislators, and to your local Chamber of Commerce. Show this article—to-day, not on January 1—to the men with official authority in your city and your State. The motor truck is a mighty unit in distribution. If the truck does not move in the winter time, your cost of doing business will mount, and your business itself will suffer.

causes hundreds of millions of dollars' waste due to business losses in vehicular traffic paralysis; excessive damage to both city streets and country highways and a tremendously rapid wear of vehicles when they have to emulate mountain goats in negotiating huge piles of ice and snow.

All of this tremendous loss can be saved if we but realize that the time has now come when, with approximately 8,000,000 motor vehicles in use in the United States, we cannot afford as a nation to permit our business to come to a standstill on account of snow.

True, snow is one of Nature's

greatest problems which man must solve. But its solution is not an impossibility if we first admit that snow is a problem and then attack that problem in a businesslike way and similar to the manner in which we, as a Nation, attacked our recent war problems. In war nothing was impossible for America. And so, too, the solution of our snow problem is not impossible.

While the snow removal problem in its economic aspect affects every taxpayer in the nation, its solution is of particular importance to the automotive industry. The fullest development of motorized highway transportation and the motorization of the farm cannot be accomplished so long as conditions in our snow belt make it necessary in some instances for large fleet owners to lay up their trucks for two or three months out of the year and use horse sleds to make their deliveries. Automotive dealers are also affected by snow because the sale of automotive equipment depends upon the ability of the purchaser to use the equipment economically. The owner and operator of the vehicle has perhaps the most direct interest in snow removal because he comes into closest contact with it and must first pay the bills caused by idle equipment and the increased operating expenses and

increased repairs resulting from the unusual road conditions when the snow is not removed.

It must be realized at the outset that adequate snow removal will cost considerable money. Last winter the City of New York spent \$5,500,000 in its unsuccessful attempt to cope with the situation. Because it failed to remove the snow, an economic business loss estimated by the Merchants' Association at \$60,000,000 resulted from the 12 days' street traffic tie-up. It would have been real economy to have spent \$10,000,000 to remove the snow properly if the greater economic loss could have been averted.

The problem is too new and conditions are too variable to arrive at any average cost of snow removal work either on city streets or country highways. Thoroughly aroused after the disastrous tie-up of last winter, New York City is planning to spend between \$4,000,000 and \$5,000,000 for adequate snow removal equipment, exclusive of labor, during the coming winter.

In the winter of 1917-1918, the State of Connecticut spent \$40,000 for snow work on a total of 970 miles of road. Including the cost of the equipment employed, the rate per mile was approximately \$45. Under normal conditions of snowfall, this figure would probably not be in excess of \$30 per mile. During the same year the State of Pennsylvania spent from \$50 to \$500 per mile to keep its State highways open for the dispatch of army motor trucks. The greatest expense was incurred in clearing the roads over the Alleghany Mountain ridges.

The snow problem may be divided into two parts, one to take care of the work in first and second class cities and the other for the main trunk highways outside of such cities. In both cases the problem may be likened to a battle between armies.

**Snow removal is essentially an emergency work.**

The snow battle consists of three main phases, the Attack, the Battle and the Clean-up. And the most important of these is the Attack. In the Great War, attacks were practised as much as a month or more in advance with every man in his place and knowing exactly what was expected of him. So it must be with any success-

ful plan of snow removal.

**The campaign must be worked out months in advance.**

Plans cannot be made the day the storm arrives. Then it will be too late. More snow battles have been lost on account of a delay in the attack due to a lack of a prearranged plan than for any other cause with the exception of inadequate apparatus with which to make the fight.

There must be a plan. Heretofore all snow removal work has been done in a haphazard manner. As a result, the work has never been satisfactorily performed. A plan, worked out months in advance, is essential.

In city snow work, it seems imperative that we have a new understanding of the word removal.

**In the emergency fight against snow which begins immediately the snow begins to fall, it is not the removal of the snow which should be sought first, but rather the plowing of the snow to keep traffic moving.**

In previous city snow removal plans, the attempt has been made to completely remove the snow as soon as it fell on certain of the more important streets. During this work the snow in the side streets has been entirely neglected, with the result that once off the main arteries, vehicles became stalled and business houses on the side streets were subjected to great delays in the delivery and shipment of their goods.

**Any adequate plan of snow removal must take care of the side streets as well as the main business arteries.**

The side streets greatly outnumber

the main thoroughfares. One plan already presented to the New York City officials would immediately designate all side streets as one-way traffic streets in which plows would clear a path immediately the snow began to fall. This would keep traffic moving, leaving the actual removal of the snow to a later date.

When the general public and you and I realize that snow removal is our problem there will be a greater co-operation between the business interests and the city authorities. This is one of the first necessities because it is apparent that no city can afford to keep idle during the summer all the snow equipment which would be required to adequately cope with the problem during the winter.

Additional labor and private vehicles and other equipment must be employed during the emergency.

Labor must be paid at a rate in excess of the average in order for the city to compete with industries.

Owners of trucks suitable for snow removal work must be paid in excess of the rate which can be obtained from ordinary industries in order that contracts can be made for such equipment in advance and such contracts kept. Heretofore such contracts have been broken because the vehicle owner could make twice as much money hauling for private interests after a storm than he could in helping to remove the snow.

It also seems necessary that the vehicle drivers should be paid a bonus by the city over and above their wages as paid by the vehicle

owners in order that they can be called and actually put into service immediately the snow has reached a certain depth, be it 4 o'clock in the afternoon or 4 o'clock in the morning.

Greater progress can be made in removing or plowing the snow in two hours after it has started falling than can be made in ten hours after it has become packed and hardened by vehicular traffic.

In the removal of snow on country roads, the same State highway organization which is used for maintenance and repair work should be employed for snow removal.

Machines instead of manual labor should be employed to the greatest possible extent. The hand

(Concluded on page 44)

## COSTS: FURNITURE AND CHINA PACKING COST SHEET PER MAN-HOUR

New York City, as of August 17, 1920

|                                                                                                                                                                                                                                                                                                                 |        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| Wages, per hour.....                                                                                                                                                                                                                                                                                            | .685   |
| Lost Time—30% .....                                                                                                                                                                                                                                                                                             | .2055  |
| (The generally accepted proportion of unproductive labor is 30%)                                                                                                                                                                                                                                                |        |
| Space—8% net available space—\$3,101.20. For 6 mos.—\$516.87 per mo., which divided by 6 as average number of packers employees—\$86.14 per man per month, divided by 225 hours=.....                                                                                                                           | .3828  |
| Overhead—1352% of total—\$3,951.44. Superintendence, office salaries, postage, estimating expenses, association dues, telephones, carfares, advertising, insurance on stock and customers' goods against fire, corporation and income taxes, office supplies, incidental expenses. Reduced to hour as above=... | .4878  |
| Compensation Insurance—Annual premium \$46.12 on \$1,924.00 (rate 2.397) Reduced as above.....                                                                                                                                                                                                                  | .0028  |
| Breakage—(3% wages) Reduced as above.....                                                                                                                                                                                                                                                                       | .0035  |
| Cost per hour for Packer's time.....                                                                                                                                                                                                                                                                            | 1.7674 |
| Profit 13 ÷ %.....                                                                                                                                                                                                                                                                                              | .2326  |

Charge to customer..... \$2.00

W. R. Wood, in the *Bulletin* of the American Warehousemen's Association.

## Eliminating

# WAREHOUSE FIRE HAZARDS

## A Few Pointers on Cleanliness and Order

By George F. Shephard

*(This is the eighth of a series of articles published in conjunction with efforts by the National Board of Fire Underwriters to remove all warehouses from the class of hazardous risks. The ninth will appear in an early issue.)*

**O**FTTIMES we are neglectful of the little things in the operation of our warehouse buildings—things which in the construction of an insurance rate go toward making high rates and premiums. It is the purpose of this article to bring to your attention a few of these little things—which after all are big factors—of which you may be neglectful.

Danger signs do not protect—they warn.

A warning sign is cheaper than the protective means, but—consider the results. Often, loss of life, or serious injury, which could have been prevented by a little forethought and consideration of your employees and their working conditions. You must consider protective devices from a humanitarian as well as an economic standpoint.

Signs are not always read; but if they were, what does a sign do to decrease your premiums for fire and compensation insurance?

One of the largest national advertisers has on its staff a competent corps of engineers whose duty it is to eliminate as far as possible conditions which would permit an accident of any kind. The firm is not doing it by painting signs all over its buildings—but rather by making war on signs and signboards and taking the protective means to prevent accident.

Care in the selection of business is a very important factor. In quoting on commodities with which you are not familiar—although you may have full detail to determine a fair rate of storage, such as weight and cubic dimensions per unit—consult your fire rate book and see how those commodities are rated as hazards. The Board of Fire Underwriters publishes a com-

modity rate book and “by their rates ye shall know them.”

Then, too, the manner in which merchandise is packed has a great deal to do with the fire risk. This factor, however, is true of the theft and pilferage risk. Limit your lia-

positing all dirt, waste packing and so on in these receptacles.

The waste can shown in photograph is manufactured by the Solar Metal Products Co. of Columbus, Ohio, and is being used extensively for collecting waste materials. There is a distinct advantage to this can in that sacks or bags are placed inside the can to receive the refuse. These are removed periodically. These burlap bags are fitted at the top with brass eyelets. The eyelets fit over corner hooks which hold the bag open. A drawing cord is run through the eyelets so that the mouth of the bag can be closed when it is removed.

Containers of any sort should be emptied each day at the close of business and not permitted to remain in a partially filled condition overnight. In large buildings a special type truck, similar to those used in department stores for collecting paper, would make for economy.

The superintendent of your plant should be charged with the duty of inspection at least once a day. In some of the large warehouses incinerators have been installed, at low expense, for the absolute destruction of dirt and waste.

Does it pay to permit waste to accumulate for the small salvage value?

Care should be used in the selection of sweeping compounds. Many of them are impregnated with oil and have been known to cause fires from spontaneous ignition. Wet sawdust has been used with great satisfaction and economy. Do not deposit rubbish or packing waste in wooden barrels!

Above all, the rooms requiring the most attention in the average warehouse are the packing room, the shipping or receiving room, and the cabinet shop. Separate store rooms should be supplied for packing material stock, and only sufficient for a single day's supply kept in the packing room. A large box covered and lined with tin with a self-closing top having a capacity of one day's supply is the best solution to your excelsior or straw problem. Do not leave loose

### WOULD YOU MINIMIZE YOUR FIRE RISK?

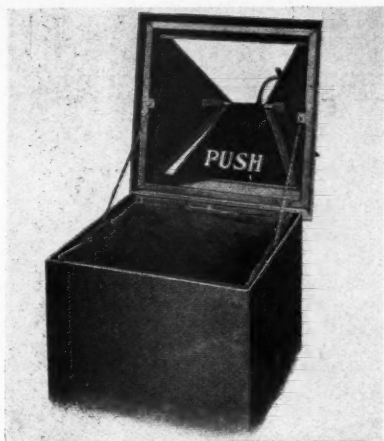
1. In quoting on commodities, consult the fire rate book of the National Board of Fire Underwriters.
2. Equip each floor with standardized refuse or waste cans.
3. Inspect the warehouse daily.
4. Exercise care in selecting sweeping compounds. Some contain oil.
5. Purchase paints and other inflammable fluids in small quantities only.
6. Provide fireproof lockers for employees.
7. Keep a constant eye on all fire apparatus.
8. Provide fire lanterns liberally.
9. Pension the aging watchman and employ youth.
10. Install mechanical means for reporting fires.

bility. A hazardous risk is not worth the return at any price.

Now as to cleanliness: Statistics prove that a large percentage of fire losses are due to unclean and unhealthy building conditions. Fire hazard and dirt are inseparable. Though your warehouse may be of the most modern fireproof construction, the element of fire hazard is ever present where there is poor house-keeping.

The first essential is the equipment of each floor with standardized refuse or waste cans. These cans should be of the approved self-closing type and employees should be instructed to minimize the cleaning required by de-





*An empty bag replaces the one removed and the can is constantly in use—no time is lost while contents are being carried away*

bales about the floor. Do not store inflammable material near steam coils or even against a wall on the other side of steam pipes. A case is cited, where a fire started in a pile of old empty grain bags from spontaneous combustion. The bags were piled against an 8-in. brick wall, on the other side of which were steam coils. The coils heated the wall and aided spontaneous combustion in the bags.

Great care should be exercised in the shipping or receiving room to prevent disorder and unclean conditions from waste materials. Employees should be prohibited from smoking in the building and should enforce this rule on all outsiders entering the building.

Perhaps one of the greatest hazards, particularly in our furniture warehouses, is the cabinet shop. All oils, paints and inflammable material should be purchased in small quantities and when not in use they should be kept in a metal or tin covered closet. No illuminating gas whatever should be permitted in this room. Provide your cabinet maker with an electric glue-pot.

Employees are in the habit of having clothing and personal effects "bunked" in the building. This condition should be overcome. Provide separate lockers. These should be of fireproof steel construction; but where they are of wood they should be equipped with screen doors to permit frequent inspection.

Regular inspection should be made of all fire apparatus. The National Board of Fire Underwriters prescribes the number of fire pails and extinguishers there shall be to a given number of square feet. If you are

not familiar with these facts, get in touch with the Board and all information will be furnished.

Because you have the prescribed equipment, do not neglect it. See that the water in fire-pails is changed from time to time and kept at maximum capacity. Changing the water helps preserve the pails. In cold weather be sure the solution is sufficiently strong to prevent freezing. It is advisable to keep a close watch on all fire escapes, ladders and doors, to see that they work freely and are not obstructed with ice or snow.

Roofs should be inspected to see that the water flows off freely. Should any stoppage occur, make immediate repairs to prevent water overflow and in the winter to prevent the formation of icicles. Ice, underfoot or overhead, forms a dangerous hazard. Remove it as soon as it forms—and avoid accidents.

Remember, too, in fighting fire, water is your greatest asset, but without light it is sometimes very difficult to get near the fire. A liberal distribution of fire lanterns should be made and not used for any other purpose. Stairways should be enclosed and properly illuminated.

As to watchmen. It is cheaper to pension the old faithful employee than to retain him as a watchman, particularly for night duty. He invariably is the sole custodian of your property, subject to the ails and afflictions of old age and, in the period of emergency, through physical disability he may be unable to perform his duties. His job is an important one. His strength, loyalty and forti-



*One hand opens the self-closing door, the merest pressure being necessary. The article is dropped and the door closes automatically, instantly and silently*

promptly is self-evident, and yet how many plants are there where the ability to send out an alarm from inside the building has been considered? In many cases the telephone is the only means of transmittal, and invariably it is inaccessible. Private alarms and signal, together with watchmen's clock service systems, have a distinct advantage. Every box is a fire alarm box.

It is estimated that about one warehouse in ten is moderately safe. Have you ever noticed the number of warehousemen that lose an opportunity to proclaim their "absolutely fireproof" buildings in letters bold? Would the percentage be one in ten? No, indeed! They realize the asset of fireproof construction and some even solicit business under that caption, but take no steps to safeguard their property and business.

Discipline, rigid inspection, and cleanliness are important factors in the prevention of fire and represent so small an investment that all can afford to practise.

The day will come when all our big and thickly populated cities will demand that all factories and warehouses be equipped with sprinklers. We can do much in the simple ways outlined in this article to reduce the fire hazard and the annual losses in the warehouse industry, and so proportionately reduce our risks and insurance rates.

The insurance companies stand willing to do all they can, but without the co-operation of every individual their operations are limited.

## THE AUTHOR

**G**EORGE F. SHEPARD during the war was an Army officer assigned to the port of New York as assistant to the port storage officer there. He will be remembered as the author of "Labor Saving Machinery in Warehouses," "Uses and Economic Value of Dunnage in Warehouses," "Fire Doors—Their Value in Storage Plants" and other articles which have appeared in *Distribution & Warehousing* during the past year. Mr. Shepard is now in the warehouse business in New York and will continue to write for this magazine.

tude must be considered, and some mechanical means provided for keeping a check on his time.

The necessity of reporting fire

# Standard Proposal and Agreement Form

*As Recommended by the Pennsylvania Furniture Warehousemen's Association to Its Members*

By CHARLES G. WIGHTMAN, JR.,  
Penn Storage & Van Co.

A STANDARD form for use in giving rates and conditions under which work is done has been advocated by the various associations for many years.

Up to the present time no such form has been adopted.

A standard form in use throughout the country would be of considerable value to the industry and a big step toward uniformity. The public would soon learn that conditions governing work were the same whether done in New York, Chicago or San Francisco—that the same degree of responsibility was accepted in one place as another.

Since the passage of the Uniform Warehouse Receipt Act in most of the States all warehouse receipts, to be legal, must contain certain conditions. While no standard receipt has been adopted for general use, yet the receipt is more or less uniform. Despite the fact that, years ago, the courts decided that the first tender or proposal given the customer must contain the conditions governing the work, many warehousemen used no form except has been adopted for general use, yet the receipt does not reach the customer till days after the completion of the work. He has had no opportunity to know the conditions. Under such conditions his acceptance of the receipt is not a legal acceptance of its terms.

It is, therefore, most important for the warehousemen that his customer knows the conditions of the work before it is done.

It is still further important that he has a written acceptance from the customer.

In drafting such a form, one of the most important conditions is that relating to liability for loss or damage. The courts have decided that a warehouseman or one engaged in moving household goods cannot limit his responsibility for

loss or damage.

We can, however, enter into an agreement whereby the customer declares a value or agrees to accept a certain amount, say \$50, for each package or contents, or if desired a gross amount on a load or entire consignment.

Should the customer desire protection in a greater sum than the above mentioned, a special agreement can be entered into. This

should be at an extra cost to him.

Such proposal and agreement should be issued in duplicate, the customer keeping the original and signing and returning the copy.

The Pennsylvania Furniture Warehousemen's Association after considerable work and study has recommended to its members a form similar to the one the writer is using, a copy of which is illustrated herewith.

## PROPOSAL AND AGREEMENT

### Penn Storage and Van Company

2136 MARKET STREET

PHILADELPHIA, PA August 19th, 1920.

To Mr. John J. Jones,  
4960 Walnut St.

Dear Sir:

We reserve the right to accept or refuse any order for storage or removing goods. We are not Common Carriers, and limit our responsibility to ordinary care.

Execution of Agreements subject to strikes, accidents, delays or other causes beyond our control.

We shall in no event be liable for loss or damage from fire, moth, rust or other causes beyond our control.

We are not responsible for damage to fragile articles unless packed and unpacked by our employees.

The OWNER hereby agrees that in event of loss or damage the COMPANY shall not be liable for any one piece or contents thereof for a greater sum than Fifty Dollars (\$50.00) nor more than Two Thousand Dollars (\$2000.00) on any one load. Should values be in excess of the foregoing amounts, then special rates are to be agreed upon and paid for by the OWNER.

AUTO REMOVALS covered by Transit Insurance in the sum of \$2500.00 per truck load.

A labor charge equal to one month's storage will be made on all goods received from or delivered to outside teamsters.

TERMS: All bills, excepting goods to Storage, C. O. D., Cash or Certified Check to Driver.

We agree to store, pack or remove the household goods as designated upon the conditions above mentioned.

Storage per month or fractional part, \$15.00. minimum charge two months

Hauling from the above address to warehouse, \$45.00.

Packing for storage as hereafter specified, \$95.50.

All china, bric-a-brac, clocks, kitchen ware, books, pictures and linens.

Paper and Pad, using oil paper on mahogany and enamel furniture.

Living Room:- Three piece mahogany suit, centre table and victrola.

Dining Room:- Mah. sideboard side table, china closet, ex. table, six chairs.

Front Bed Room:- Walnut twin beds, chiffon-robe, chiffonier, dressing table and three chairs.

Guest Room:- Enamel bed, chiffonier, ladies desk, and three chairs.

Fourteen two box and three hair mattresses. Paper servants mattress.

Very truly yours,

PENN STORAGE AND VAN CO.

Per Chas. G. Wightman.

The above agreement is accepted in accordance with the terms thereof.

Packing to be started September 12th. removal to be made September 16th, 1920.

Signature of Owner... John J. Jones.

Future address...Drexel Building, Philadelphia.

KINDLY SIGN AGREEMENT IN DUPLICATE, RETURNING COPY.

*This proposal and agreement form is issued in duplicate. The above, the original, is in white. The duplicate is in yellow and has the word "copy" stamped across its face in capital letters. The customer keeps the original and returns the copy to the warehouseman*

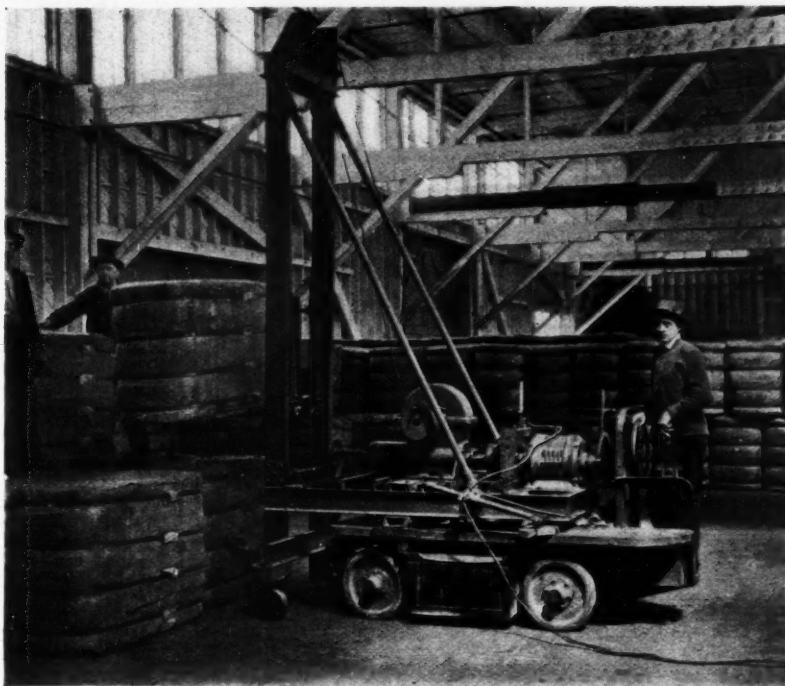
# Portable Stacking Elevator

*Produced by Seattle  
Engineers*

## Reduces Unloading Costs

*in the Warehouse*

*By Gilbert Gordon*



*Showing one of the portable stacking elevators developed by Seattle Port Commission engineers to reduce cost of unloading cargoes. Machine is here shown lifting a bale of cotton in one of the Commission's warehouses*

### AT HALF COST

Engineers at the Port of Seattle have developed a portable stacking elevator and the expense of unloading bales and boxes has been cut 50 per cent. Other machines of the same type are to be installed and the economy will be even greater. Mr. Gordon tells about this labor-saving device.

**G**UNNY bales, weighing from 1400 to 2000 lb., are received in large shipments on the piers of the Port of Seattle. So long as these did not need to be piled, no freight handling problem was involved because one man with a two-wheeled truck could deliver the bales at the desired place unaided and at a very low cost. As floor space became more valuable, however, it was necessary to pile the bales two high. The labor cost then increased enormously because it took ten men to lift the bales to the second tier.

A study of the problem undertaken by G. F. Nicholson, chief engineer, and G. Whitestone, electrical and mechanical engineer, of the Port of Seattle, resulted in the development of a portable stacking elevator, which has greatly reduced the cost of unloading cargo of this character. The device resembles a miniature motor-driven pile driver with a steel platform operated in the leads in place of a hammer, the entire apparatus being mounted on an electric truck. The truck is of a standard type operated by storage battery, and when it is desired to use the truck separately the clamps which hold the steel frame to the truck body are removed and the pair of pivoted struts at the rear are swung down to bear on the floor. The truck can then be run out from under the elevator mechanism proper.

The mechanism consists of an electric motor geared to a pair of drums on which are wound the hoisting

cables that operate the platform. The gear ratio can be suited to the speed required. For handling gunny bales and general freight, a lifting rate of 60 ft. per minute has been found suitable. The lifting capacity is about 3000 lb. The motor is served by an extension cord from the nearest outlet in the power circuit, but if desired a motor could be used which would be operated by the storage battery. The controller for the hoisting motor is provided with an automatic cut-off effected by a cable carrying adjustable stops. This arrangement shuts off the power and sets the brake at a predetermined point. The leads are hinged so they can be laid back to permit the machine to go through doorways. For use in narrow aisles a turntable has been designed to be placed between truck and elevator proper. This allows the elevator to be swung around at right angles to the truck, in which position it can handle freight equally well.

For handling gunny bales the machine is placed in the center of the shed floor and truckers with their two-wheeled trucks deliver the bales to the machine platform. In this way the machine can work as many as six piles at a time. The steel platform comes to rest on the floor and onto this the man with the two-wheeled truck dumps his load without help. The platform then elevates the bale, the machine is moved to the desired location and the platform thrust over the lower tier of bales. While the bale is held in position over the pile the machine backs off. To aid further in finally placing the bale, the platform is slightly elevated and pushed against the bale while the men guide it into place. This operation is very rapid and is said to eliminate at least six men from each crew engaged in putting gunny bales on the second tier. The machine also makes it possible to extend the piles several tiers if desired at practically the same cost as for the second tier. Piling gunny bales in three tiers



by man power would be impracticable because of the excessive labor cost.

An ordinary storage battery truck in this service is found to operate approximately 12 hours without recharging. When a direct current motor is used on the elevator and draws energy from the truck battery, the length of service for each recharge is reduced by about 25 per cent. However, the use of a motor connected to the storage battery is recommended by the Port of Seattle authorities because it eliminates the extension cords and the need for power wiring.

When the first stacker was put in operation on a gunny bale cargo, a record of cost data showed a saving of about one-half over the usual cost of handling the bales. The cost of unloading this cargo was \$5,000. If five

stackers had been available, one for each of the boat's five hatches, port authorities stated that the cost would have been reduced to \$2,500. Enough machines are to be added to the two now in service to permit of an entire cargo being handled by this means.

The machine has been effectively used for stacking canned salmon with the aid of four wheel trailers on which the salmon cases are loaded, a light wooden bottom being placed first and the stack piled on this. These trailers are loaded at shipside and drawn by electric trucks to the stacker. The steel platform of the elevator is run underneath the wooden bottom and the load lifted to the desired height where the cases are removed by hand. This method releases the trailer as soon as it reaches the stacker and is relieved of its load.

## COST ACCOUNTING IS PROGRESSING IN KANSAS CITY

By B. S. Brown  
Kansas City Correspondent

**K**ANSAS CITY, MO., Sept. 21—Merchandise warehouse cost accounting has advanced farther in Kansas City during the past month than in any six months of previous history. The real progress is delighting both those who have been cost data enthusiasts and those who have been lukewarm. Positive action is bringing about support that all the enthusiastic propaganda had failed to arouse.

The most definite step has been taken by one of the larger merchandise warehouses, which has installed a complete cost finding system. This system has been operating only two weeks at this writing; and the manager has no conclusions to give out yet. The other warehouse managers have been told of the innovation; and they are waiting hopefully for the meeting at which the results of the work will be reported.

For this enterprising manager has promised to give the others the benefit of his discoveries.

"I have been an ardent advocate of cost accounting," said one of the leading merchandise warehousemen. "But I have not seen my way to installing a complete system in my own establishment. With the experience that this fellow warehouseman can supply, I expect to get the pointers which will start me into cost accounting."

A second element which has stimulated interest is the article in the September issue of *Distribution & Warehousing*, concerning bookkeepers who planned to do some investigating of their own. This article has been read by executives and by accountants in nearly every Kansas City warehouse—and discussed by them, too.

"The owner, the manager and the office force of our company have talked over this matter of bookkeepers getting together to study Kansas City warehouse and transfer company accounting from their point of view," said one accountant. "All of us think it a mighty good idea, and the executives are going to help us get started on the plan."

A condition that is stimulating co-operation is the overflowing of warehouses with business. Competition is not a factor in matters of statistics of warehouse operation; managers can work together without fear that some other manager will take advantage of the information he gives. This does not mean that Kansas City managers are any more jealous of each other, or mistrustful, than warehousemen in other cities; but that a frankness and freedom in discussion prevails now that probably would not exist were all of them scrambling for business and worrying about paying taxes.

## A. S. M. E. ORGANIZES A MATERIALS HANDLING UNIT

NEW YORK, Sept. 1—A materials handling section of the American Society of Mechanical Engineers has been organized. The section held its first meeting recently in the Engineering Societies Building, Robert M. Gates, acting chairman, reporting that the petition signed by 381 members for the formation of this section had been approved by the society's council. Mr. Gates outlined the field and indicated there was a great variety of problems to be solved.

W. N. Dickinson emphasized two lines of action—first, careful study of the entire field and determination of the underlying principles of materials han-

dling; second, to systematize the responsibility of handling so that the actual work of handling might be expedited.

Need of co-operation with other organizations having the same problems was stressed by F. M. Feiker. H. V. Coes spoke of the need of educating the public to the proper consideration and use of materials handling apparatus as a means of reducing present abnormal costs.

It is anticipated the new section will assist in arranging the keynote session of the society's annual meeting, at which there will be concentration on the subject of transportation. Meanwhile offi-

cers will be chosen by the new section and work will be put under way.

## TELLING THE STORY

**U**NDER the title "What Is Fireproof Storage?" the Watson Fireproof Storage Warehouse of East Orange, N. J., has issued a twelve-page booklet, with covers, setting forth in detail this company's facilities for storing and distributing. Fire prevention, transportation and traffic are subjects featured in this attractively printed publicity pamphlet.

# REPORTING ON DAMAGED GOODS

## A Warehouse Service of Which the Shipper Is the Beneficiary

By L. T. Crutcher  
President, L. T. Crutcher Warehouse Co.

**T**HE proper handling of goods damaged in incoming cars by public warehouses is always a problem. As practically all of our customers expect the warehouse company to represent them fully in such matters it is quite up to the warehouseman to see that every detail is carefully watched in the handling of such damage, and proper forms should be in the hands of every live warehouse company for the reporting of the damage in the simplest possible form.

The inspection of damaged goods by the railroads is not uniform in all cities, but the claim departments of all railroads operate alike. There is nothing more satisfying to one's customers than to render them a complete report of the damage with all the points required by the roads fully covered so that when the claim is presented to the railroad there will be nothing more than the usual "buck passing" left for the railroad and your customer.

In Kansas City the **Western Weighing and Inspection Bureau** inspects all damaged cars for all railroads entering the city. This arrangement has been in effect less than a year and the forms we are using now were used when the railroads made their own inspection, but are equally good to-day.

The sheet headed "Damage Report" is filled in by typewriter from information supplied by the warehouse foreman and is always made up immediately following the unloading of the car. The report is either ready to be signed by the inspector or is made up when he arrives. The report is verified by the warehouse foreman or superintendent.

The original copy goes to the shipper, the second copy is mailed

Warehouse forms which constitute the Crutcher system of co-operating with the traffic manager in reporting on damaged goods. Mr. Crutcher, in his article, explains how these forms are used

to the claim department of the railroad and we retain the third copy for our files.

At the time we mail the copy of the damage report to the railroad we also attach the form letter for the attention of the claim department, duly notifying them of the damage in the house. Many of the railroads call us at once and request that the damage be delivered to them and the drayage included in the claim, and others call for it by their own team. Three copies are made of this letter and handled in the same way as the Damage Report.

As there is always a labor charge to be made in connection with the handling of the damage, this charge is made at once and reported on the inclosed invoice. As much as possible in the way of information is given on this invoice in connection with the damage, for this is filed by the customer along with his claim for the actual loss of the goods.

Two copies are made to the customer, for one must go eventually to the railroad and the other be retained in his files as our statement to be paid. We endeavor also

to secure the freight office bill covering the movement of the car and place the necessary notation of damage on it by typewriter as well as the bill-of-lading, and send them along with the rest of the papers in connection with the car as described above.

When these papers reach the customer there is nothing left for him to do but file his claim after including his charge.

We have had these forms in use for several years and in that time have had practically no correspondence over claims and we are safe in saying our customers have had little or no trouble in getting their claims handled promptly by the railroads.

Good warehousing long ago ceased to be only a matter of unloading cars of goods and placing them in storage to be reshipped. In order to command the attention and confidence of the shipper a warehouse company must watch every detail and render such service that even the shipper could not afford to give himself. How to do this and still leave the shipper a profit is the secret of good warehousing.

# \$ DOLLAR IDEAS \$

## SEND IN AN IDEA—EARN A DOLLAR

**DISTRIBUTION & WAREHOUSING** will pay \$1 each for ideas for this department, which is twofold in purpose: First, it gives you an opportunity to get paid for telling the other fellow something he hadn't thought about that should help him in his business. Second, you are going to be helped by the Dollar Ideas which the other fellow sends in. Tell something of how you revised your stock report system, obtained a new customer, reduced your fire insurance, built bigger business through advertising, eliminated rodents, ironed out a labor problem, repiled your goods with profit, "slipped one over" on a competitor—how you achieved anything at all worth the telling.

The shorter the snappier—it's the idea, not the length, that counts. And—

By the way: Call this department to the attention of your employees. They may have Dollar Ideas that even you don't know about!

## SELLING THE SHIPPER ON YOUR LOCATION

**E**NABLING the traffic manager to visualize the strategic position of your town in relation to surrounding territory, and of your warehouse in relation to your town, is good business in the opinion of Charlton A. Marshall, president of the Wallace Transfer & Storage Co. of Cincinnati.

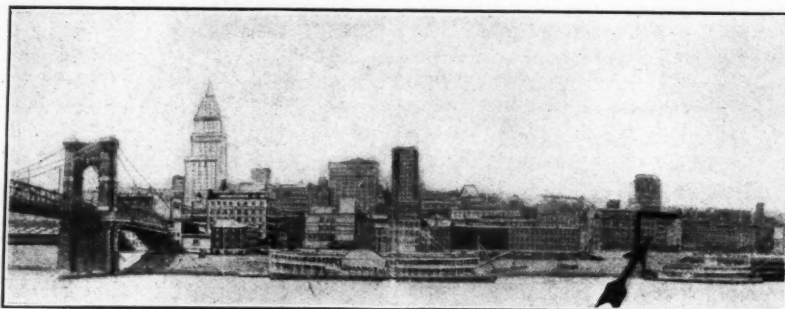
To shippers who inquire regarding the Wallace facilities for storing and distributing Mr. Marshall sends out small folders, and two of the illustrations in it are shown herewith. For the Dollar Idea page Mr. Marshall explains:

"The big circle on the front shows the central location of Cincinnati.

"On the inside of this folder you will see a view of the sky line of Cincinnati, and the arrow points to our location on the river front.

landing with granite blocks. This will make Cincinnati have one of the finest public landings on the Ohio."

The text on the Wallace company's



*This illustration, from publicity folder circulated by the Wallace Transfer & Storage Co. of Cincinnati, gives the shipper an instantaneous impression that the company's warehouse is favorably located to handle business*



Each inner circle represents 100 miles, and six of these circles, or 600 miles each way, makes Cincinnati the center of all territory east of Kansas City, making Cincinnati the most logical point for distribution of all cities east of the Rockies.

"Cincinnati is also located on the Ohio River, where shipments can be made by boat every evening and reach their destination the next morning within 150 miles up or down the Ohio.

"This folder gives the manufacturer or merchant in the other cities the location of Cincinnati as compared to other cities, and also an idea as to our own location.

"We might also add to the above that Cincinnati is spending about \$250,000 in front of our warehouse on the river front, in repaving the whole

folder gives shippers information regarding Cincinnati as a distributing point and relating to carload lot economy, pool shipments, railroad connections, motor truck and team facilities, bank references, etc. Text is in gold and blue, illustrations in blue, and folder measures about seven by six inches.

## BUILD HIGH AND NARROW

**M**OST warehousemen in building a new plant buy a plot of ground and erect a building over the entire plot as high as their capital affords, but with footings and walls heavy enough to carry additional stories. Then they divide this building into different rooms and compartments on a standard plan for each floor.

Suppose, instead of this method, the warehouseman just constructing a

building should buy a plot of ground and decide at once how high his building is eventually to be, and then build it higher and narrower to that full height. Having done that, let him put his smaller lots on the lower floors and his larger lots on the upper floors, graduating larger as he goes up.

A high building is more easily seen than a low building. The advertising value of his high and narrow unit



\$

## DOLLAR IDEAS

\$

would be increased. By putting the smaller lots on the lower floors he naturally lessens the amount of time spent on the elevators. It is obvious that if four lots are put in a certain space, more trips are necessary to that place than if one lot is put there. It takes more time to go to the top of the building than it does to go to the second floor, hence the putting of smaller

lots on the lower floors is a great saving in elevator time and also of men's time.

When new units are to be built they can be constructed right alongside the other one and on the same plan of construction, which is not true if the warehouseman starts with a low building and adds on to the top.—*H. L. Halverson, Secretary, Boyd Trans-*

*fer & Storage Co., Minneapolis.*

## ELIMINATING RODENTS

**C**HLORIDE of lime, scattered where rats are, absorbs moisture and then throws off chlorine gas, which is very distasteful to rats, and they leave on the "double quick." —*Nap. B. Jillson, Dayton, O.*

## Can a Woman Conduct a Warehouse?

**M**RS. ANNA D. KLINCK, of East Orange, N. J., is one of the few women in the United States engaged in the storage warehouse business. She has been active in this line since the death of her husband, Owen K. Klinck, several years ago, and has made a success of it; so much so that the Orange Storage Warehouse Co., which is the concern she conducts, has lately taken over a new building in addition to the large fireproof one it had been operating for some years.

About fifteen years ago, Owen Klinck, who had been formerly with John Mulligan, of Newark, N. J., was asked by a company which was opening a storage warehouse in East Orange to take the managership. Mr. Klinck accepted the position, and guided the business through the first dark days of its enterprise. Just when the business was beginning to run smoothly, Mr. Klinck was called by death. As his demise was sudden, the firm had been unable to make any provisions for his loss and as the owners were men living outside of New Jersey and did not even know the combination of the safe at Mr. Klinck's death, they turned to his wife for assistance.

It is an old saying that every experience is later on a benefit to us. Mrs. Klinck had familiarized herself with the storage business, in order to permit her husband, who never had been very robust, to take an occasional afternoon off to play golf, which was his chief recreation. In this manner she had gained a practical knowledge of the business.

When the company asked her to run the business until some one could be found to take Mr. Klinck's place, she at first demurred. It was not so much the running of the business that she dreaded as it was the hard task of viewing, day after day, everything that would call to mind her husband,

## THIS ONE DOES!



*Mrs. Anna D. Klinck, "Warehousewoman," East Orange, New Jersey*

whose loss had been the greatest sorrow she had ever known. Constantly, at first, her heart was torn at the sight of his familiar handwriting, of work he had planned, of meeting customers who came in and asked for him, not having heard of his death. But gradually in the stress of business her mind was taken from her grief, and when the company asked her to sign a contract to remain with them for four years, she did so. When the contract expired, Mrs. Klinck had become a large stockholder in the business, and has now the controlling interest.

Mrs. Klinck claims that most of her success is due to reputation for honesty and integrity which her husband established for the company, and also to the faithfulness of the help that he had gathered around him—employees who remained with Mrs. Klinck and loyally supported her when she took over the managing of the business. Had they resented her authority on the grounds that she was a woman,

or had they left her in the first critical months, she declares, she would never have been able to have reached the plane upon which she now rests. —*A. Genevieve Dwyer, Philadelphia.*

## LITERATURE

## STEEL WAREHOUSES

**T**HE Blaw-Knox Co., manufacturers of steel products, Pittsburgh, has issued a new catalog, No. 21, covering the Blaw-Knox line of galvanized sheet steel buildings known to the trade as "prudential steel buildings." These structures are made in every commercial size and have a variety of uses, including storage and warehousing. Two pages of this 32-page catalog, which may be had free on application to the company, are devoted to buildings for storing and warehousing raw materials or manufactured products. Information relates to sizes, lighting, ventilation, erection costs, portability, etc.

## LYON ON THE MAP

**T**HE Lyon Fireproof Storage Co., Los Angeles, has issued a new edition of a city map of Los Angeles, with orange circle and orange arrow indicating the company's location. Map is nineteen by twenty-four inches in size and on reverse side are illustrations showing exterior and interior views of warehouse and views of motor trucks, methods of crating, etc., together with text describing the "Let Lyon guard your goods" facilities.

## PARKER TRUCK

The Parker Motor Truck Co., Milwaukee, announces that its new catalog is ready for distribution and may be had upon application. The catalog is unusual in that the text is confined almost exclusively to truck features, all sales talk having been omitted. Recent changes in models are incorporated.

## WHEN SHIPPING TO THE TROPICS:

# PACK RIGHT

Pests and Native Indifference Combine to Destroy Yankee Products Which Are Not Properly Prepared Against Exposure

## A STORY OF THE LACK OF WAREHOUSE FACILITIES IN CENTRAL AMERICA

By O. C. Gould

**H**AVE you ever reflected how prone we are to interpret Somewhere Else in the terms of our immediate surroundings? Boma's facilities in terms of the Bush Terminals? Few of us can picture the port of destination, particularly when it lies so far beyond the horizon that the Stars and Stripes do not cover it.

Shippers in the United States are developing much trade with the American tropics and, of course, it is up to us to handle it in the best possible way. We cannot escape some mental vision the moment we first see the order or address tag—Tegucigalpa, Managua, Bogota or El Cayo, visualize the route if you can! What experiences must this shipment survive to arrive in first class order?

There are various guiding admonitions from Consular officers. Packages must be strong to withstand rough and frequent transshipment; should be at least reasonably waterproof for lightering in rough bays; and ought to be feather-light for mule transportation and light customs charges. Sometimes there is advice to bale instead of crate, or to crate in place of boxing. What is bound for Bogota is to be handled according to one formula, they say, and that for Salvador according to another. More than one friend of yours has dog-eared book after book at the public libraries in an effort to picture conditions as they are.

There is one thing which residence in the tropics has forced me to view seriously. That is, due emphasis on wholly deplorable warehousing arrangements. The leisurely, happy-go-lucky methods of the tropics leave freight over night, or for weeks or even months, wholly or partially unprotected. The ravages of weather and of a multitude of pests have apparently never been considered by many shippers. Nor are these limited to what may be termed warehouses. They are to be reckoned with all down the trail, and through store or shop, right into the ultimate consumer's home or factory. What is more, they are aggravated by the ignorance or miserliness which orders or sends that which is not constituted for tropical longevity. Re-

sults count; you should see some of them! Thousands of shipments represent a total waste—purchase money, handling, freights and insurance thrown away for articles which on arrival are nearly useless, or worse.

You cannot foresee what will happen to your shipment even if you know these warm climes well. The ingenuity of the natives in their pursuit of indifference or recklessness toward your pets, and the persistence of pests, exceeds whatever an American can imagine. You can only prepare for and expect the worst, and wait with slight anticipation of disappointment.

When I used to be in the Far Eastern tropics, I thought nothing could be worse than its weather with its alternation of dryness and humidity and its intense heat. However,

it can hardly be said that these factors are less potent in the American tropics. Of course, on the Pacific side of the mountains rainfall is comparatively light but on the Atlantic side—well, consider what would happen to that case of fabrics or that shipment of food in cartons of outside, en route from steamer to train, or by the open door of a freight car, when one of those six-inch-per-hour showers arrives? You may be sure the natives will prefer it should get wet to getting wet themselves in any rescue effort. The wetness of a

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**I**N this article the writer urges shippers of commodities into tropical lands to pack their goods **RIGHT**. Warehousing in those climes is not what warehousing in the United States is. To quote Mr. Gould:

"The leisurely, happy-go-lucky methods of the tropics leave freight over night, or for weeks or even months, wholly or partially unprotected. The ravages of weather and of a multitude of pests have apparently never been considered by many shippers. . . . You cannot foresee what will happen to your shipment even if you know these warm climes well. The ingenuity of the natives in their pursuit of indifference or recklessness exceeds whatever an American can imagine."

Mr. Gould is a resident of Punta Gorda, British Honduras, Central America. From the North American shipper's viewpoint, "warehousing" centers in those regions are nothing but "bailiwicks of moth and rust," says the writer.

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lighter is no worse except that salt starts corrosion more rapidly. Cartons will not stand tropical conditions well, however suitable for interstate commerce. If they survive wet, they are "nuts" to rodents and insects and for a fact attract both sometimes when the contents would not. Cases, bales or crates, all right; cartons, never! The southern jobber is the worst offender, sending abroad stuff intended for domestic consumption, without regard to the interest of his customers.

Consider what a wetting would do for your shipment (or even storage) in a region of high humidity, if not sealed. If there is any cloth or leather element, mold is sure to follow; and, of course, mold would affect many foodstuffs and other goods readily. Many metals will rust. If the



shipment is cement or lime you will comprehend the virtue of the light, air-tight metal drum and hate the sack and slack barrel. Chemicals are usually well protected but chloride of lime in small packages is one which is often useless on arrival.

Most metal articles should have weather protection. I bought a popular Yankee make of oil stove and oven once but got only half of it—the half the rust had not had time to finish. More than one keg of nails not galvanized has been worthless from rust before the buyer broke in its head. So light is American galvanizing that it is not invulnerable. Many a coil of fencing or corrugated sheet has rusted badly before arrival, and were we not acquainted with English galvanizing we might think it unavoidable. Even our tin containers, without which much that reaches the tropics perfect could not go there at all, are of such poor grade as to yield in many cases before their tasks are done.

### Building Poor Respect

Consider, too, what the hot, dry season can accomplish. I have seen vehicles en route, shrunk out of their tires. That barrel of pickled fish or pork will never be eaten after it has stood a few days in the sun waiting for a coastal steamer to take it off the wharf. You should see the paint peel from implements and their timber check nearly to destruction. To be sure, with most things, it's the occasional or even unusual event that is responsible for damage, but it is a train of occasional incidents, likewise, that builds up poor respect for methods and products.

Warehousing, as it is practised by our tropical cousins, is hardly worthy of the name. The accommodation is so limited or so poorly located that the least congestion or unusual conditions force a luckless percentage of shipments to out-of-doors exposure. This is often aggravated by slow journeys over poor trails along which refuge can rarely be had. Bad as this is, the pests within doors are often more costly than conditions outside.

There is real comradeship between these pests—yes, and between the weather and them. Rough handling or exposure opens a door through the package by which rodent or insect reaches the contents. The rat prepares a way for insects, and vice versa, and sometimes even a snake pursues the road they've blazed, not to damage but unpleasantly to surprise the recipient. The pests cannot always achieve notable results while the goods are en route but they get a good foothold in the food, or wood, or upholstery, to continue destruction at their leisure; weevil, wood louse or cockroach, each according to his taste. Many a cardboard cylinder of oats, a pasteboard package of raisins or an American oak desk has been colonized on its way by never-resting enemies.

The hermetically sealed metal container is, of course, widely and successfully employed. Compressed in it (that is, if the jobber has waited to obtain a supply packed for export), Quaker Oats travel everywhere and stand on shelves for months undamaged. So great is the tin can, one wonders why sometimes it is not of better stuff or more widely used. It alone will carry most foodstuffs unscathed but it is seldom used for such things as prunes, cheese, cornstarch and candy. Indeed, we have reverted from the

tin can for many dry stuffs to the cardboard tube with tin ends or the pasteboard package, and the curse of tropical consumers is on the saving individuals who are responsible. The light metal drum would be as serviceable for flour, rice and cornmeal, for example, as cement (all of them more valuable per package), but we still suffer the slack barrel and rat-enticing jute sack. So high are freights and so valuable these articles, or so anxious are folks to get the stuff free from weevil pollution or destruction, that the extra expense of metal drums would gladly be borne to protect against loss and defilement of food. This, incidentally, is one of the most important elements of our exports thither.

Fabrics are fine eating for many a pest. There are moths who consider baled American ready-cut suits as a delightful diet—millions of them, more penetrating and avaricious than those which hunt our furs in the north. Rats and mice are fond of them, too, and they like fine underwear, stockings and the like. They hold efficiency races with the moths, ants and weevils, for championship among themselves and to see how high a combined batting average may be reached before the packages are moved or opened. Latterly we have been helping them by seeking to beat the Germans at light packing or to outdo the Army's baling squad in saving cargo space.

After all, mold and pests are of more import than freights and lessened duties. There is no need—because light strong cases may be more expensive—recklessly to go the limit and bale. Sometimes it is wise and economical, but don't forget the pests! Eliminate excelsior and such stuff to reduce rat attraction but don't let your goods suffer thereby from rough handling. And remember the sealed can, drum and case. It protects cloth as well as rolled oats; ribbons as well as biscuits.

### The Suffering Natives

Be under no misapprehensions about warehouses and freight sheds. In Guayaquil or Panama, as in San Francisco, concrete and other wise construction may be fighting the rat as a plague carrier, but these places are few and exceptional. Here and there the United Fruit Company has installed modern facilities, too. But generally there is no protection against rodents. Instead the native seems to watch them with unholly glee, provided they are damaging the goods of someone else. He has to conserve his energy, anyhow, for if he hasn't the hookworm, he suffers from the climate, or vice versa.

There is almost complete indifference to insect control, with the sole exception of the mosquito. Moths, weevils and wood-lice (except when the latter proceed to dessicate some wooden warehouse) are not faced as enemies quite equal to rats in resourcefulness and destructiveness. Cold storage could control the weevils but cold storage is not common in the tropics yet and probably is never used there as a weapon against weevils in flour or moths in cloth.

It is the consumer who pays the bills, of course. But he, and the merchant, dislike the necessity. Trade is going to go to those who can best fight the dangers of transportation. Have I suggested protective measures for that which you make or handle, whatever it is?

### Canary Islands Warehousing

WASHINGTON, D. C., Sept. 10—Authorities at the ports of Las Palmas and Santa Cruz, in the Canary Islands, are planning extensive warehousing facilities as a part of harbor improvements which are to cost \$20,000,000, says a report received by the Department of Commerce from F. A. Henry, United States consul at Teneriffe. Certain areas will be filled in and reclaimed in developing the project.

### Russian Flax Warehousing

WASHINGTON, D. C., Sept. 1—Before the war, European Russia's warehouses took care of four-fifths (420,000 long tons) of the world's supply of flax. During 1920, it is expected that approximately only one-fifth of this amount will go into European Russian storage plants, owing to reduced cultivation because of the Bolshevik activities. These estimates come to the Department of Commerce from Soviet sources,



Jackson Express &amp; Van Co.,

Chicago

# WHAT'S WHAT IN IX



**N**UMBER seven of the Jackson furniture storage warehouses is under construction, at 5949-53 W. Madison St., Chicago, and when completed will be the headquarters of the Jackson Express & Van Co.

Situated in a high class residential district, the building is designed to cater to the better quality of furniture storage.

Construction is of reinforced concrete with solid brick enclosing walls and hollow tile interior walls. Grouped together in the rear of the main building is a 50 by 75-foot loading shed, together with the stable, hay loft, paint shop, and caretakers' apartment. A 10 by 25-foot freight elevator of sufficient capacity to carry a loaded van is being provided, and a push-button passenger elevator. The entire second story is a mezzanine floor, containing a heated piano-room, rug-room, trunk-room, and space for small lot storage.

At one side of the building, and extending through it, will be a passageway for use of employes without entering into the main building, with the

drivers' window at about the center, opening into the rear of the general offices. Entrance and exit doors to this passageway are electrically controlled from the offices.

Sprinkler equipment is of standard construction and approved by the Chicago Board of Underwriters. Inter-communicating telephones connect all portions of the building, and the entire building is steam-heated.

Exterior of the building is of light Kittanning brick and cream-colored and polychrome terra cotta. The style chosen is known as "Chicago School of Architecture," which has developed in the Middle West during the past few years. The terra cotta is richly ornamented, forming a relief to the heavy mass of masonry walls. The front windows are protected with heavy wrought iron and bronze guards in verde antique and polychrome. The main entrance is denoted by a broad architrave of iridescent glass mosaic in brilliant colors and gold. The Jackson trade mark, a flame-colored glass spear, is blazoned in terra cotta across the front. One reason for the light-color scheme is a new departure—flood-lights at night, consisting of powerful searchlights, arranged so as to light the whole of the exterior of the front of the building.

The interior, office and lobby portions are treated in caen stone with groined ceilings, of the Gothic style. There will be a large bas-relief panel on one of the office walls, showing the modern method of moving. The severity of the stone walls and floor is relieved and the design enhanced by polychrome wrought iron work, painted glass shields, rich hangings and rugs. The counters, base and sills are of marble, and the vestibule and built-in seats are of antique oak. The furniture is to be of American walnut.

(Concluded on Page 29)

# IN NEW BUILDINGS

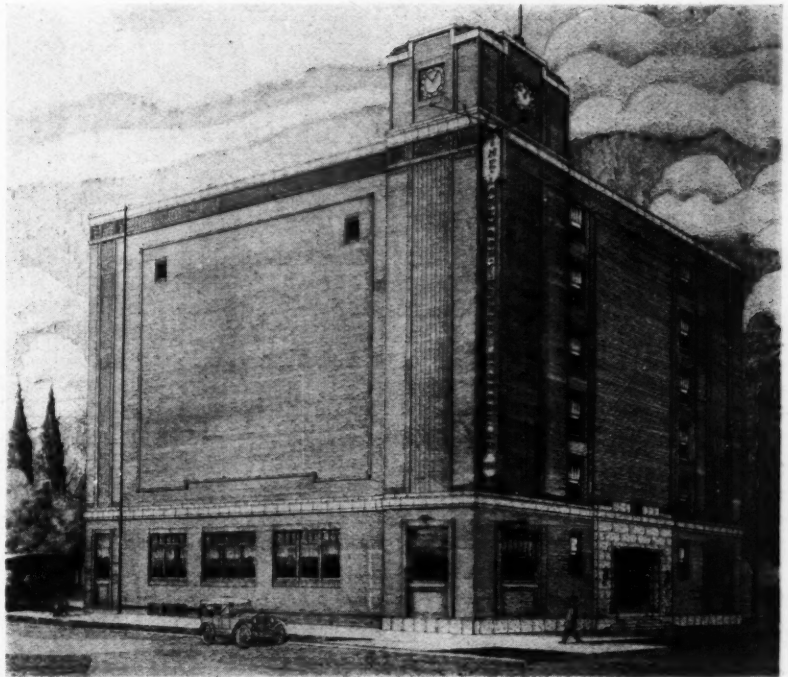
X

Lakewood Fireproof Storage  
Co.,

Lakewood, O.

**T**HE illustration herewith is of a \$175,000 six-story fireproof storage building which is nearing completion on the corner of Detroit and Lincoln Avenues, Lakewood Ohio, by the Lakewood Fireproof Storage Co.

The building, one of the most modern of its kind, is 60 by 100 feet long, a total floor area of approximately 36,000 square feet. Construction will be of reinforced concrete throughout, brick walls and solid steel sash. Exterior has been given special treatment and will consist of decorative brick, cut stone and wrought iron grills and entrance gates.



The entrance and lobby will be finished in marble and mahogany and will lead directly to a silver vault which will be both burglarproof and fireproof. The entrance to this vault is provided with an elaborate vault door of bank design.

The first floor, in addition to the above, will accommodate a piano room, attractive offices, packing room, moving van storage and area for large freight elevator which will serve the upper floors. The piano room, and offices will be finished in mahogany and will also be provided with accommodations to care for the comfort and business of the various clients.

The freight elevator will serve all the upper floors, which will be used for storage exclusively.

Each floor will be sub-divided into individual compartments in order to accommodate the storage of household goods. Each unit will be further provided with an especially designed safety locking device to insure maximum security to the patrons. A basement will accommodate a heating unit.

The organization will be headed by J. J. Gund, president and general manager, who has had wide experience in storage warehouse service.

The George A. Rutherford Co. are the general contractors on the building and the W. S. Ferguson Co., 1900 Euclid Building, Cleveland, Ohio, are the architects and engineers and also have charge of supervision of construction work.

Jackson Express & Van Co. (Concluded from Page 28)

The idea expressed in this warehouse is the essence of warehouse requirements, security, substantial construction, efficiency, simplicity, richness and dignity.

The building was designed by Geo. S. Kingsley, architect, of Chicago, and is being erected under his supervision.

# Labor Saving Machinery Expedites HANDLING AUTOMOBILES At San Francisco FOR EXPORT SHIPMENT

By Charles W. Geiger

**T**HE large increase in the number of automobiles being sent out to the Orient by way of the port of San Francisco has developed a number of new methods for handling the cars between train and steamship.

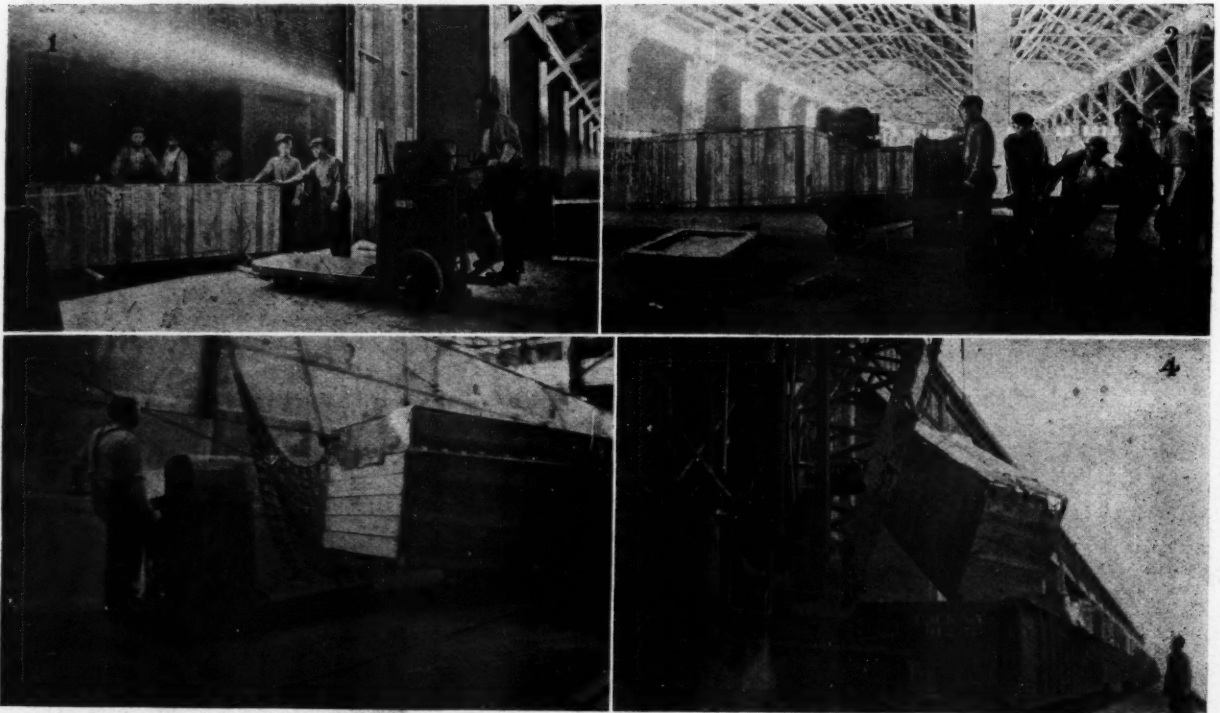
Photographs Nos. 1, 2 and 3 show how electric tractors are employed in delivering crated automobiles from box cars to ship side. The handling of the vehicles by this method has greatly speeded up the unloading of cars, and has decreased to a considerable extent

the number of men to each crew.

With the use of the electric tractor only six men are employed to each crew. Photograph No. 1 shows the first step. Almost every dock in San Francisco is equipped with a depressed track, which brings the floor of the train on a level with the floor of the dock, as shown in this picture. The electric tractor is run close to the freight car door, and a cable is connected with the tractor and the crated automobile. A roller is then placed under the automobile, and when all

is ready the electric tractor is run backwards until the slack in the cable is taken up. The momentum of the tractor will jerk the crated automobile several inches toward the dock. This action is then repeated until the vehicle is pulled partly onto the dock.

The device shown in photograph No. 2 is then employed and the automobile is raised so that the "dolley" seen in this picture can be placed under the automobile. It formerly required sixteen men to raise a heavy vehicle so that the



By utilizing the electric tractor, as shown by photographs numbered 1, 2, and 3, only six men are employed to each crew handling a motor car—once, sixteen men were necessary. Brown hoists are used (photo No. 4) for unloading boxed cars from gondolas



"dolley" could be placed under it, but with this lifting device six men raise the weight in less than one-tenth the time formerly required.

If the stevedores are not ready to take the automobile aboard the steamship the unloading crew delivers it on the dock near the hatch; and when it is ready to be taken aboard, the tractor tows it alongside the vessel, as shown in photograph No. 3.

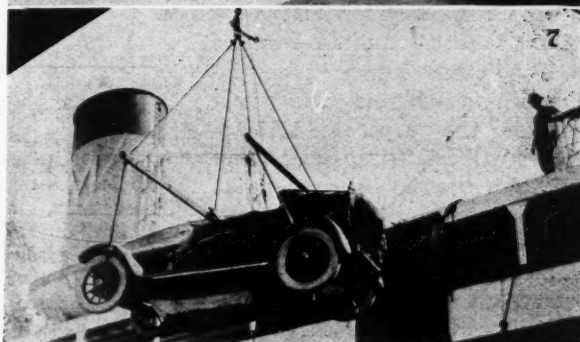
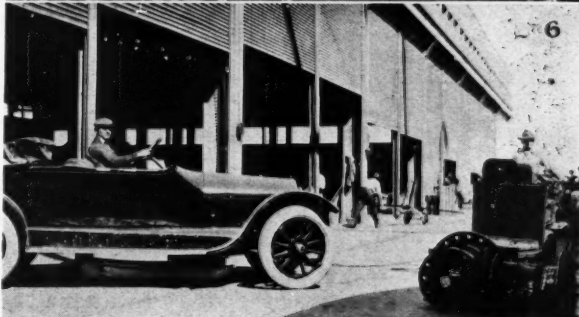
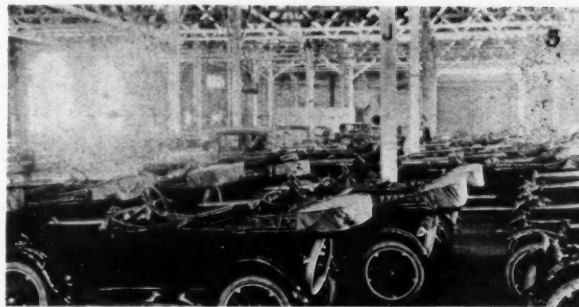
A new method has recently been employed in unloading boxed automobiles from gondolas, as shown in picture No. 4. The Brown hoist is rented from the Harbor Board. A cable is attached to the crate, which is lifted clear of the freight car and deposited on the floor of the dock by the crane. By this method a car containing six automobiles can be unloaded in twenty-five minutes, with a crew of three men working in the gondola. It formerly required a large crew four hours to unload six automobiles by hand.

On this particular day ninety Dodge cars were unloaded at the docks, the entire lot being consigned to Batavia and Samarang, Java. The demand for automobiles in Java is very great, due to the excellent roads and to the circumstance that in the Dutch East Indies there are large oil interests. The purchasing power of the Islanders is increasing, due to the high prices received for their products, such as sugar, copra, etc. On virtually every vessel sailing from San Francisco to the Islands are large shipments of pleasure cars and motor trucks.

Photographs Nos. 5, 6 and 7 show the method employed by the Matson Navigation Co. at San Francisco in loading automobiles for shipment to the Hawaiian Islands. Because of the fact that the Matson company does not require automobiles to be crated, a saving in freight rates is effected amounting to from \$50 to \$75 on each vehicle.

The automobiles are received from the freight stations in San Francisco and stored in the bulkhead building as shown in picture No. 5. When ready to be taken aboard a vessel they are towed alongside by means of electric tractors, as shown in photograph No. 6; and by means of the special arrangement shown in picture No. 7 they are hoisted aboard the steamship. This particular car was a Buick.

A total of seventy-four automobiles was taken aboard the vessel shown, for the Hawaiian Islands. This system is used also in taking aboard automobiles



*How automobiles are stored, handled and loaded aboard ship by the Matson Navigation Co. at San Francisco, is shown in the three photographs above. Note that electric tractor is used in handling (No. 6)*

belonging to passengers bound for the Islands. Many tourists take their cars along for the purpose of touring the Islands.

## LEADERS OF INDUSTRY ARE NOW OPTIMISTIC

### Substantial Companies Strengthen Their Position in Meeting New Demands of Situation

NEW YORK, Sept. 1—While there is nothing tangible upon which to base a more optimistic view of the future, there is evident in financial quarters a more hopeful tone. It seems to be psychological rather than practical, but it is shared by many men who have made careful and thoughtful studies of the situation. They believe that if the country can get over the next sixty days safely there will be no more real danger.

The better outlook is not based upon

any expectation of a renewal of industrial activity, but rather the reverse. Bankers have hailed with gratification the gradual slowing down of manufacturing activities and they expect this process to continue. It has been gradual and orderly thus far, and they believe it will continue to be. Temporary slackening of production is the only means they see to restore something like normal conditions within a comparatively few months.

Banks report a real falling off in demands for new money for commercial purposes and this is regarded as a hopeful augury. This is attributed to a determination on the part of manufacturers to turn their present inventories into cash instead of going into the market for

new supplies, except such as are necessary to complete their product. This has reduced the volume of their borrowings. As inventories are resumed it is not likely any present attempt will be made to continue production on a large scale.

Unbalanced inventories constitute one of the most menacing factors in the present situation. There are legions of companies which have enormous inventories and very little cash. As fast as the raw materials are turned into finished product and sold their technical condition improves. Automobile manufacturers were the first to suffer from the inevitable readjustment and they have been the first to make a virtue of a necessity. Almost without exception they have cut their production materially.

# READERS' FORUM

*DISTRIBUTION & WAREHOUSING will welcome receipt of letters from men in the warehouse and distribution fields who have something worth while to say for the benefit of others. Communications of this character should be addressed: Readers' Forum, Distribution & Warehousing, 239 West 39th Street, New York City*

## HEREIN IS POINTED OUT HOW SHIPPER AND WAREHOUSEMAN CAN CO-OPERATE TO EFFECT ECONOMY AND BUILD BUSINESS

Dallas, Tex.

**E**DITOR, *Distribution & Warehousing*—I have noted with interest for some time your effort to bring distribution and warehousemen together. I had a striking illustration of the value of doing so with a customer to-day.

He sells a manufactured article which for the purpose of this article we will call "Deep Sea Diving Apparatus." The factory packs these in cases, six to the case and the case weighs 170 pounds and a minimum carload contains two hundred crates.

After quoting the gentleman our rates for handling the storage and drayage on his particular commodities, conversation developed the following startling fact: You will note that each crate contains six machines and that there will be two hundred crates in a car, or a total of twelve hundred machines in each car. Now, from the simple fact he is unable to buy a carload, the factory sell to him at 50 cents per machine cheaper than in LCL lot; that would mean he saves \$600 on the car by buying in carload lot instead of having the factory ship in LCL lot. In addition to that, his freight rate per machine in carload lot figures 22 cents per machine less than when shipping from the factory in LCL.

Having twelve hundred in the car at 22 cents each you will observe that he saves \$264 by buying in carload; the freight rate when added to the \$600 he has made

from the factory, makes him \$864 which he has made by buying in carload and shipping to a warehouse company for distribution.

He estimates he will handle a car per month and after we have taken

### Economy and Business

**T**HIS letter from a Texas warehouseman—W. I. Ford, of Dallas—tells how one of his customers, unable to obtain capital to finance the consigning of goods to himself from factory in carload lots, arranged with a bank for funds and—made a profit by having the manufacturer ship to him in care of the warehouse and in full car lots, the profit being represented in part by the saving derived by having goods moved CL instead of the more expensive LCL. Warehouse receipts played a part in this practice of economy.

The distribution manager and the warehouseman each can get a thought worth while from Mr. Ford's letter: by co-operating one with the other the shipper's representative can contrive to cut down distribution costs and the warehouseman can build better business.

out our charges to him for the car at \$72.50 per car, on the average he will still have from his saving \$791 net profit by buying in carload lot, using our warehouse and service for distribution. Even if it took him three months to dispose of a car he would still have \$700

net profit by using our warehouse for distribution.

Now, it happens that he was not able to pay for an entire car, but an accommodating bank told him they would advance the money for handling, so as he sells his machines he lifts one of our receipts, paying the bank its charges, which, by the way, in this particular instance, he has added to the price of his machine as against former shipment against the factory, and he is still netting his \$700 per car.

If you call this letter to the attention of traffic and distribution managers as information on what can be done and saved by shipping in car lot to warehouses over the country and then reship f.o.b. warehouse point, you will have done a great service both for the warehousemen and the shipper.—  
*W. I. Ford, Director and Manager, Inter-State Forwarding Co.*

### INQUIRY REGARDING DRAYAGE RATES

Lincoln, Neb.

**E**DITOR, *Distribution & Warehousing*:—It is now two months since we met in Minneapolis at the Central Club Convention. All of us appreciate the knowledge that we secured at this convention and the hospitality of the Minneapolis members.

I am extremely interested in learning from those of you who do a drayage business the rates which you are now charging your patrons. By that I mean both tonnage and hourly rates. We are vitally interested also in knowing what your truck and team costs

(Concluded on page 38)



# TWO BITS

*A Bit Here*

*A Bit There*

Vol. I

Gotham, October, 1920

No. 4

## EDITORIAL

"THIS office is shy on blotters" was what ye editor announced last mo., we adding: "How about it, boys?"

Well, all we got to say now is that it pays to advt. in *Two Bits*. No sooner had our Sept. issue appeared than the U. S. Govt. began to get rich in postage prepaid on batches of blotters, & ye editor has received enough to last until Warry Harding or Jimmie Cox, as the case may be, retires as nat'l Prexy. Both men are from Ohio.

"Where did you get all the blotters?" the business manager of *Two Bits* wanted to know.

"Julian," ye editor replied, handing him a package of 200 of them, "we got them by advertising for them in the estimable journal you are business manager of."

"Is that so?" said the business manager. "Well, then, put an advt. in for me next mo. that my office is shy on automobiles."

"No," replied ye editor firmly,

"because first we got to get some matches to put in that match holder which Dan Bray, the Kansas City storager, gifted us with recently."

Which leads us up to the real purpose of this editorial, which is to express our thanks for blotters received from Charley Milbauer of Gotham, of the Trans-Continental Freight Co.; Joe Wirthman of Kansas City, of the Lincoln Fireproof Storage Co.; Frank Combs of Dallas, of the Pulliam Transfer & Storage Co.; C. S. Ehrman of Bklyn, of the Merchandise Storage Co.; J. R. Driver of Berkeley, Cal., of the Students' Transfer & Storage Co.; F. C. Weicker of Denver, of the Weicker Transfer & Storage Co.; H. L. Urban, Sullivan's Delivery, Milwaukee.

C. S. Ehrman included a bid to ye editor for luncheon & Frank Combs & H. L. Urban sent in price of subscription for *Two Bits*, they being less thoughtless than the others.

## NEWS ITEMS

Syd Green, the Petersburg, Va., storager, was a Gotham passer-thru of late, he calling on ye editor & thence entraining for Yarmouth, N. S., vacationing. *Two Bits* gets most of the news.

Ye editor was in Boston last mo. & called on Geo. Lovejoy at his elegant new offices up near the roof. Congrats, Geo., only it smelled pretty painty.

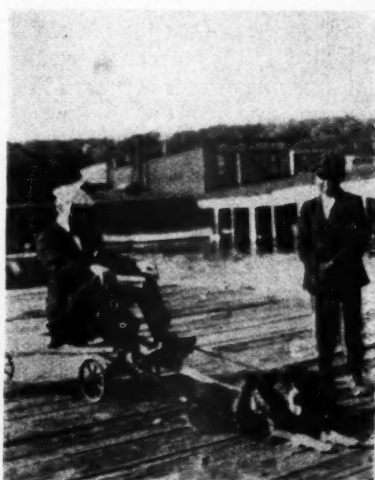
That warehouseman we mentioned last mo. as borrowing 75 cts. from ye editor & not repaying it back, has not done so yet. We will give him one more mo. before exposing who he is.

Herb McEwen, the St. Louis storager & forwarder, was ye editor's luncheon guest in Gotham last mo. Come again, Herb, you are a hearty eater.

## THIS IS A SCOOP

No Other Newspaper Has It.

ONE of *Two Bits'* western correspondents has got wind of a bitter controversy in the warehouse industry, which is threatened with a split, No. vs. So., like in Civil War days, tho not for the same reason as then. This controversy is about feminine beauty, which a southern storager asserted, at the Mackinac Island convention in July, did not exist in the northern part of the U. S. This assertion got a northern storager mad & he took his camera & went hunting with it. The result is published herewith by *Two Bits*, showing that feminine beauty does exist in the north. The northern storager sent a copy to the southern storager & wrote to him: "Here is a snapshot which the writer thinks will hold its own with any of those southern belles. If you have any that beats them, send me a snapshot of them, as I would like to look them over." Well, our correspondent got onto this fued, which was good enterprise on his part, & also got one of the northern storager's snapshots, & and here it is:



Well last month we promised a picture of how a certain Chicago storager engages in outdoor athletics, and here it is. This is a photo of J. H. Troyer, prexy of the North Shore Storage Co., driving an Indian dog team at Cheboygan, Mich. (Our photographers are likely to snap you any time.—Advt.)



This photo was given to *Two Bits* for publication to illustrate above article. "This is a Scoop" on condition we would not disclose the cameraman's name on account of family reasons.

## A POEM

We want a good one for publication next month. How about it, boys?



# EDITOR'S PAGE

## "TELL YOUR BANKER!"

IT is conceded to-day that the number of merchandise warehouses is not sufficient to meet the demands of national distributors. This situation foreshadows the construction of new storage plants, notwithstanding the high costs of labor, materials, etc. Indeed, a survey recently conducted by a Baltimore financial institution discloses that in building operations, warehouses as a class are leading in New England and the Middle Atlantic and South Atlantic sections and rank second in the East North Central, East South Central and Pacific States, taking precedence over factories, office buildings, stores, low-priced dwellings and high-grade dwelling apartments in the sections where the storage plants rank first.

With the demand admitted, and with activity shown to be under way, the question of obtaining capital becomes more and more a pressing question. Hence any development along financial lines is certain to awaken immediate interest in the warehousing and distributing industries.

The Warehouse Bond & Share Co. is entering the field with assurance that it will be prepared to put the dollar behind the merchandise warehouse. Every storage executive who has been contemplating putting up a building to meet the national distributor's demand for space will read the story of what this financing organization is planning—a story which begins in this issue of *Distribution and Warehousing* and which will be concluded in future issues. The traffic manager will be equally interested to know what the Warehouse Bond & Share Co. pur-

poses to accomplish, for its plans embrace the lowering of distribution costs.

Into the situation enters your banker. You, among warehousemen, who may wish to call upon the new financing organization for aid in putting up a new building, will consider it a wise move to acquaint your banker with the purposes of the bond and share company. This should be done by showing him these articles in *Distribution and Warehousing*. As a matter of fact, it is planned to distribute reprints of them among financial interests generally and you may find, when you go to your banker, that he already knows something of the company's program. If he does not, he should be told.

There is a wonderful opportunity for the winning of profits through distributing commodities by means of the merchandise warehouse.

It is significant that one of the purposes of the Shippers' Warehousing and Distributing Association will be to influence manufacturing companies which do not now utilize the storage plant, to adopt the practice of routing through warehouses.

With the increase of this class of business, the demand for such buildings will be greater and new ways of obtaining financial backing for construction purposes will have to be found. It is this mission which the Warehouse Bond & Share Co. has in mind to fill—and it is a mission which must have the confidence of your banker, and his approval, if it is to be successfully matured.

"Tell your banker."

## SNOW REMOVAL

THERE are nearly 8,000,000 motor vehicles in use in the United States to-day. The nation's business loss last winter because of indifference to snow removal is conservatively estimated to have been half a billion dollars.

With the increase of freight rates, the motor truck becomes a more important transportation unit in short haul transfer work, which includes distribution from the warehouse to destinations within a radius of several hundred miles. And the value of the motor truck for city delivery purposes will grow with the increasing number of manufacturers who use the warehouse as a distribution medium.

Consequently, cleaned streets in the city and unobstructed highways in the country throughout the winter months are necessary to the profitable operation of a warehouse company's business. The subject is, then, one which must be studied by the storage executive who owns one or more trucks. The situation is worthy of discussion and action at the conventions which various national warehousing associations are to hold perhaps before the first snow flies. Meanwhile, the storagemen's organizations in the various cities are accustomed to meet monthly, and it is clearly to their interest to get in touch at once with their local municipal officials and bring pressure to bear to have snow removed before it piles and drifts so high as to prevent the passage of trucks along the roadways.

After the snow has come will be too late.

The remedy must be arranged for in advance.

# WILL YOU BE LISTED

in the

## 1921 Warehouse Directory

### ?

THE work of preparing the 1921 Warehouse Directory, which will be published in the December issue of *Distribution & Warehousing*, is going ahead full speed. Questionnaires have been mailed to all those on our list and hundreds of progressive warehousemen have already furnished us with data regarding their facilities, to be incorporated in the Directory. If you, Mr. Warehouseman, have received a questionnaire from us and have not returned it, please do so immediately. If you have not received a questionnaire, let us know at once and we will see that you are provided with one. We are naturally dependent, to a great extent, for the completeness and comprehensiveness of this Directory upon those who should be and will be represented in it if they furnish us with the necessary information regarding their facilities.

No charge of any kind or obligation of any description is incurred by being listed in the Warehouse Directory. Our aim in compiling and publishing it is to make it complete and the most thoroughly representative listing of warehouses that could possibly be put out. The value to any warehouseman in being represented in this Directory is greater beyond all measure than the small amount of time and effort it will cost him to furnish us with the information which we need.

We need, want and invite the co-operation of everyone in the industry to make this Directory what it should and can be. There have been a great many changes in the warehouse industry during the past year. New concerns have entered the field. Old concerns have enlarged their facilities and moved into new locations. We particularly urge secretaries of warehouse and transportation associations to furnish us with lists of all of their members so that we may be sure to invite each and every one of them to supply us with data for the Directory.

The time before the Directory must go to press is getting short. We urge you, Mr. Warehouseman, in a spirit of altruism and for the good of the industry as a whole, to co-operate with us by providing us promptly with the information desired.

Return that questionnaire to us today.

# FROM THE LEGAL VIEWPOINT

By George F. Kaiser

Mr. Kaiser is a practicing lawyer who makes a special study of warehousing and transfer affairs. DISTRIBUTION & WAREHOUSING cannot agree to answer all questions, but will do so as far as is possible.

## DOES MOTH DAMAGE CLASSIFY UNDER "INHERENT" QUALITIES?"

**E**DITOR, *Distributing & Warehousing*:—We note that quite a number of the warehousemen have the following clause in their warehouse receipt, which is like the inclosed form [see accompanying illustration]:

"The Warehouse will not be liable for loss or damage to said property from change of weather, climatic conditions or from the inherent qualities of the property."

There is some question in our minds as to just what the inherent qualities are. For instance, the damage from moths will be attributable to this clause, or should the warehouse receipt bear an additional clause protecting them against damage from such insects?

We understand that such questions as above receive the attention of your paper. We would like to be in position to know that we are protected under the present wording of our warehouse receipt.—*Harris Transfer & Warehouse Co., Birmingham, Ala.*

### Clause Should Be Specific

**ANSWER:** The clause in the receipt reading "—or from the inherent qualities of the property," etc., might well have the words "or any other act or thing reasonably beyond control of the company," added to it.

A limited liability clause should be specific, and include in its terms all damages and acts for which the warehouseman does not hold himself responsible.

I have been unable to find any reported case dealing with damage from moths. The nearest to this kind of a case that I have been able to find was the case decided in Kentucky in January, 1910, where the court held that a public or private warehouseman, who discovered weevil in his building, was not responsible for damage caused by them when he notified the owner of the wheat stored to remove it so that he could disinfect the building and the owner failed to comply with his request.

Of course the warehouseman is not responsible for any injury which cannot be guarded against by the use of ordinary care. Thus he has been held not responsible for damage caused by rats when proper precautions to prevent it were taken. *Taylor vs. Secrist & Disney (Ohio 299)*.

The important point in your ques-

tion is how did the moths get in the property to damage it. If they were to be found in large quantities in the building and disinfecting or the like would have prevented the damage, you would be liable as a warehouseman. If, on the other hand, they were already in the goods stored, and mere use of ordinary care would not have

Consecutive No. ....

## HARRIS TRANSFER & WAREHOUSE COMPANY

(HEREINAFTER CALLED "WAREHOUSE")

Main Office: 1827 First Avenue, Chamber of Commerce Building  
Warehouses, 2121-31 Avenue F—608-16 S. 22nd St.

Warehouse .....  
Floor .....  
Section .....  
Room .....  
Lot .....

Birmingham, Ala. .... 191

Does hereby acknowledge that it has received from .....  
hereinafter for convenience called "owner" for storage at the rate of \$..... per month, in its Warehouse above numbered, the goods enumerated  
and mentioned hereinafter in "Schedule A" to be delivered to the owner on the date specified in the receipt hereon, subject to the following conditions, terms,  
and conditions of storage, which are hereby agreed to by the owner and the warehouseman, and which shall govern the warehouseman's liability and conditions, viz:

The warehouseman will not be liable for loss or damage to said property by fire, destruction, fire, theft, pilferage, leakage, frost, change of weather,  
climatic conditions or from the inherent qualities of the property or from its perishable nature, or for damage from any act or thing, or for  
any damage or injury to fragile articles that are not packed or that have been packed or wrapped by others than the employees of the Warehouse or  
that are not known or described as fragile articles herein, nor for the loss of jewelry, diamonds, or other valuables left in or stored with said goods un-

less the same are specifically designated and expressly receipted for by name and value.

The liability of the Warehouse is limited to Fifty Dollars (\$50.00) any package (including the contents of such package described below) unless the  
value thereof is made known to the Warehouse at the time of receipt and is so receipted for. Packages marked "C. U." signify contents unknown, and  
are stored at the owner's risk and without recourse on the Warehouse except as to the value of the receiptable in which the goods are contained,  
and are stored at the owner's risk and without recourse on the Warehouse except as to the value of the receiptable in which the goods are contained,  
No goods will be delivered until the Warehouse receipt issued for the same has been surrendered and all charges against said goods, whether for  
storage, haulage, advances or otherwise, have been paid in full; and it is expressly understood and agreed by the owner or depositor of this property  
that storage charges shall be due on the ..... day of each month in advance, and all such charges or other charges, or any part thereof shall remain un-

paid for ..... months after maturity, said property or so much thereof as may be deemed necessary by the Warehouse may be sold by it  
as authorized by law for the payment of Warehouse charges, and said sale given. Said Warehouse or its officers or agents are hereby author-  
ized to purchase at such sale as fully as if they were strangers to this contract.

The owner contracts, promises and agrees that he will give written notice to some officer of the Warehouse of any claim which he may at any  
time have against the Warehouse for loss or damage to said property or any part thereof, or for the non-delivery of the same, with full itemized and  
detailed statement in writing sworn to, of the nature, character and extent of the injury causing the loss or damage, and the cause of the injury, if  
known, within ..... days after the removal of said property from the said Warehouse, and an action at law or in equity shall be maintainable  
against the Warehouse for the recovery of such loss or damage, and the non-delivery of any of said property, until 30 days after the receipt of such  
notice by the Warehouse; that he will submit any or all of said property claimed to be damaged, as often as required, to any person designated by the  
Warehouse; that he will not raise any objection to the property until the written notice of injury or damage hereinafore provided for has been  
given to the Warehouse and the opportunity of inspection afforded it, and that he will submit to an examination under oath by any person designated by  
the Warehouse, and submit to the same, upon demand, touching any injury, loss or damage to said property, or the non-delivery of any part of the same,  
and that a failure, omission or refusal to do, conform to any of the foregoing covenants, promises and agreements shall operate as a for-  
feiture of any and all claims or demands which he may have against the Warehouse for damage or injury to, or the non-delivery of any part of said  
property, and such failure, omission or refusal shall be a perpetual bar to any action, either at law or in equity, for such loss or damage, or the non-  
delivery of said property or any part thereof.

The owner hereby warrants that he is the sole owner of the legal title to all the below mentioned property; that the same is free from all en-  
cumbrances, and hereby waives his right to claim personal property exempt against any demand which may accrue hereunder.

This receipt is NOT NEGOTIABLE and contains the entire agreement between the Warehouse and the owner, and no one has authority to vary  
or add to the terms thereof, or to bind either of the undersigned by any statement or agreement not herein contained.

Where goods are allowed to remain in storage for more than a month, a full month's storage will be charged.

Failure to return this receipt within ten (10) days for correction shall be conclusive that the receipt is correct and delivery demandable only in  
accordance with the terms and conditions herein.

The masculine where used in this contract shall include the feminine, a corporation or a co-partnership, according as the same may be signed,  
and the singular shall include the plural.

Charges advanced \$..... Charges advanced for hauling, packing, labor and.....  
amount now known; estimated at \$.....

HARRIS TRANSFER & WAREHOUSE COMPANY.

By ..... (Owner)

Witness as to signature of owner: .....  
Mail Address: .....

### "SCHEDULE A" INACCURACIES MUST BE REPORTED IN 10 DAYS.

1. .... 41.  
2. .... 42.  
3. .... 43.  
4. .... 44.

*Harris company's receipt which contains exemption liability clause, including the words "or from the inherent qualities of the property." As further protection, Mr. Kaiser suggests the adding of "or any other act or thing reasonably beyond the control of the company"*

NO GOODS DELIVERED WITHOUT PRESENTATION OF THIS RECEIPT ACCOMPANIED BY A WRITTEN ORDER.



prevented the damage, there would be no liability.

It is safer to add words like those set out above or words providing that "or any injury, deterioration, damage, or loss not occurring through the negligence of the company."

## FROZEN APPLE CASE WON BY THE STAR COMPANY

THE right of a warehouseman to diminish his liability by special contract, where his building is without equipment or facilities for heating or for regulating the temperature, is discussed by the Supreme Court of Nebraska in the recent case of *Gesford vs. Star Van & Storage Co.*

The action was brought to recover damages for apples frozen while in storage, in a building operated for storage purposes in the city of Lincoln.

The customer alleged that in November, 1917, he entered into a contract with the warehouseman to store apples in his storage warehouse and that they were stored in the basement of the building. He claimed that 275 barrels were frozen and greatly damaged, during the following January, because the warehouseman negligently permitted the basement where they were stored to become too cold.

The warehouseman contended that he had never operated a cold storage warehouse and that the customer knew that the building contained no facilities for regulating the temperature, as he had inspected the warehouse and had selected that part of the basement in which he desired the apples to be stored, thereby assuming all responsibility of loss or damage by freezing.

The record shows, without dispute, that the basement of the building where the apples were stored was divided by a partition wall into two rooms, each 70 feet by 45 feet in size. The room south of the partition was filled up at the time the customer went to arrange for storage, and the north room was alone available for storing the apples. There was a furnace in the south room, which incidentally threw out some heat there, but which was designed to heat the office upstairs, and not the basement. There were no facilities for heating the basement, and it was no part of the warehouseman's plan in the operation of its storage business that the basement should be heated. The only way by which any heat from the south room could reach the north room of the basement was through a door in the partition, which, however, was habitually kept closed. There is no evidence to indicate that, if it had been

kept open, there would have been enough heat to raise the temperature materially in the north room.

When the plaintiff went to the defendant's office with a view to arranging for storage, an agent of the warehouseman went with him into the basement. They passed through the south room into the north room. The customer made no inquiry or examination as to the facilities for heating. Nothing was said by either party as to their being no method of heating the north room. The customer testified that he inquired whether anything was ever frozen there, and that the warehouseman's agent answered in the negative. The latter testified, however, that he cautioned the customer as to the risk of apples freezing in the north room, and explicitly told him that it must be at his risk. The customer denied that any such statement was made. The Court said:

"Before he entered into the contract, the customer in this case was fully advised that the warehouseman would not accept the apples for storage and agree to protect them against freezing, and the customer definitely assumed that risk. In the face of that explicit understanding, he is in no position to urge that he had no reason to suppose that the defendant's warehouse would not be so heated as to guard against freezing, and it more-over clearly appears that the defendant, in the ordinary course of its business, neither possessed nor professed to have facilities for heating the building." (177 *Northwestern Reporter*, Page 794.)

The company was therefore held not responsible for the damage to the property by freezing.

## INTER-STATE COMMERCE DECISION

WHETHER a trucker, injured in unloading freight shipped from another State, was engaged in interstate commerce was the question in the recent Texas case of *Cox vs. St. Louis and S. F. R. Co.* The District Court held he was, the Circuit Court of Appeals decided he was not, and the Supreme Court of Texas finally overruled the Circuit Court and agreed with the District Court before which the case originally came.

Cox had been employed by the railroad company as a trucker at Hugo, Okla. He was directed by his foreman, named Reams, to unload four bundles of paper, each weighing 110 pounds, by throwing them, with Reams' help, from the truck to the top of a pile some four feet in height while resting the handles of the truck

on the warehouse floor and while holding down the handles with one foot. Reams was authorized by the railroad company to determine the manner in which the paper should be unloaded and to direct Cox in unloading same. The paper was part of a shipment from Paris, Tex., to Hugo, Okla. Cox had started to raise the truck handles so as to dump the paper from the truck to the floor, with a view of raising it from the floor to the top of the pile, when he was stopped by the above directions from Reams.

Cox said, when he received his directions: "Mr. Reams, the truck will dump."

Reams replied: "They won't do anything of the kind. Back up and let them down and put your foot on the truck handle, and we will unload from the truck."

While Reams and Cox were unloading the bundles in accordance with Reams' instructions and while throwing off the second bundle, the truck handles suddenly struck him in the chest, causing his injuries.

The bundles flew up when Cox's foot released the handle which was occasioned by the act of Reams in swinging his end of the bundle on the truck before Cox was ready to swing his end and before it reasonably appeared to Cox that Reams was ready to make the swing.

The Court therefore decided that liability for the injury rested on the railroad company and was governed by the Federal Employer's Liability Act. (*U. S. Comp. ST.* 8657-8665. 222 *Southeastern Reporter*, Page 964.)

## Common Carrier Ruling

THAT an express company transporting packages from Porto Rico to the United States is a common carrier although it did not own the steamers on which the goods were carried, was the decision of the New York Supreme Court in the case of *Spitzer vs. Porto Rican Express Co.*, which came up on appeal before it a short time ago.

The express company was therefore held liable for having unreasonably delayed in complying with the shipper's directions to return the goods, and judgment for the shipper, in the sum of \$511.02 to cover damages to the goods, was directed. (183 *N.Y.S. Page* 19.)

## NEXT MONTH

An Article on "Cost Accounting"

by E. H. Bacon,

Vice-President, Louisville Public Warehouse Co.

## KANSAS CITY EXPECTS HEAVY FALL STORAGE

**Territory Flooded With Salesmen,  
and Warehousemen Anticipate  
They Will Benefit**

KANSAS CITY, MO., Sept. 24—A year ago the branch manager of a national manufacturer remarked that more goods were sold in Kansas City territory than in Chicago and Detroit territory combined. Last week this manager remarked that Cleveland could be added to the two cities mentioned.

Approaching the subject of sales value in Kansas City territory from another angle: Every year one crop or another turns out well enough in Kansas City territory to guarantee the prosperity of this district. In this year, 1920, several crops are turning out results equal to or better than their sporadic records. With all of these good things coming at once, the prospects for big business in Kansas City territory can conservatively be called "excellent." Fortunately, all the crop money is not coming in at one time. Wheat is being moved slowly; a great deal of corn will be held to feed to live stock, which will be marketed over a long period. Instead of having large gobs of money to speculate with or spend lavishly, the farming communities will have plenty of money distributed over the coming year.

Sales managers seem to have scented this condition—which has not modestly been kept a secret. There is a flood of salesmen in Kansas City and through the territory—and all seem to be happy. To be sure, money is tight in western Kansas, where the crop hasn't been sold yet with which two-year-old debts have to be paid. The Federal Reserve Bank at Kansas City is this week showing its highest level of borrowings from other banks, due to the necessity for financing the abnormally large crop and live stock movement. But merchants are better able to finance their undertakings, because the evidences of sure sales are already in sight. Jobbers and manufacturers can estimate pretty closely the very large volume of commodities that the territory will want and will be able to buy.

The obvious prospects for large sales in this territory, the large volume of future orders actually placed, and the increased production of factories have been factors in the filling of Kansas City merchandise warehouses. Then, too, besides the firms already enjoying distribution in the territory, there have been many new firms which are now entering with their products. A temporary factor, however, in the condition that reached almost the stage of congestion a few weeks ago, was the increase in freight rates. Manufacturers hustled to get goods billed out under the old rates; and these goods came into Kansas City in large amounts. The movement this way did not lessen materially with the institution of higher rates, however, as merchandise is still coming in rapidly. Another factor in the heavy arrivals in

the past few weeks was the improved service of railroads. It seems likely that goods got through much faster than many manufacturers anticipated; they had been forehanded, discounting possible delays, in the shipment of goods designed for the holiday trade of their retail customers in this territory. Instead of being delayed and held up, and arriving in Kansas City in October or November, the freight has got through in September.

Stuff does not stop here. There is no indication of any cessation in the business of retailers throughout the territory, and goods are being forwarded from warehouses, and being handled under pool car distribution arrangements, in normal volume. Kansas City hears that in some centers congestion exists because goods are not moving out; but this is not the case here.

## INQUIRY REGARDING DRAYAGE RATES

(Concluded on page 32)

are per day if you have them in hand. How many hours per day do you average to operate with your rigs?

As soon as this information is received the writer hopes by condensing same to be able to give you information in return that will be of value to you. Please do this if possible.

Yours very truly,

Globe Delivery Co.,  
F. W. Putney, Secretary.

## New A. W. A. Members

PITTSBURGH, Sept. 20—Two new members have been elected by the American Warehousemen's Association, it is announced by Charles L. Criss, general secretary. They are:

De Pue Warehouse Co., San Francisco. Affiliating with merchandise sub-division. Officers include John F. Neville, president; Edward H. Beane, secretary.

Motor Transport Co., Tampa, Fla. Affiliating with merchandise sub-division. Company is engaged in long distance motor transportation and warehousing. Officers include M. A. Staples, president; O. L. Henderson, secretary; C. P. Fish, manager.

## New Dallas Project

DALLAS, TEX., Sept. 11—One of the largest warehouses in the Southwest is being constructed by the Southwestern Forwarding Co. on Harwood Street, adjoining the Gulf, Colorado & Santa Fé tracks. Building will cover 100,000 sq. ft., will contain 1,112,000 cu. ft. of space, and will be built in three units. Motor-driven conveyors and stackers will be installed. Cost of project will be \$150,000, and it is expected the first unit will be ready for occupancy by Jan. 1. Trackage on either side of completed warehouse will extend 534 ft.

## STORAGE ACTIVE IN COLUMBUS TERRITORY

COLUMBUS, OHIO Sept. 24—Activity has characterized the warehouse and transfer business in Columbus during the past month. This is especially true of merchandise transportation and storage, which has been extremely brisk in every way. All available equipment has been kept busy taking care of both the inbound and outbound freight which has developed in this territory. With easing of railroad congestion has come a larger volume of trade. Likewise the railroad improvement has helped the outbound freight business.

Merchandise storage is running largely to sugar, of which there is now a large amount in storage; canned goods, cereals and coffee. In fact all food stuffs have had a good movement in the past month, and this has been reflected on the local trade.

Household goods storage has also been active, but a let-up in the large volume has taken place. This is attributed largely to the fact that more families are now moving out of the city than are coming in. This has resulted in a larger vacant space, but since virtually all available space was already occupied, conditions are still good. Another factor has been the building of houses; this has relieved the housing conditions to a small degree and likewise relieved the congestion at the storage plants.

No change has been made in the charge of space in Columbus warehouses. Prices are held at the levels which have prevailed for some time, and there seems little likelihood of immediate changes.

Warehousemen generally believe that conditions will continue active during the fall and early winter, and preparations have been made accordingly.

## Terre Haute to Have Big Cold Storage Plant

TERRE HAUTE, IND., Sept. 15—The Independent Food Products Corp., which recently acquired the C. W. Jean Company plant in this city, has approved plans for erection of a modern cold storage plant, four times the capacity of the present building on South First Street. The new building will have a capacity of 100 carloads and will accommodate wholesalers and growers in this vicinity.

The Independent corporation in taking over the Jean company acquired in addition to the Terre Haute plant, two central stations in Worthington and Huntingburg, Ind., as well as 300 buying stations in Indiana, Illinois, Kentucky and Tennessee.

The new cold storage plant will be four stories high of concrete fireproof construction, with latest modern storage equipment.

## Terminal Co. Expansion

BALTIMORE, Sept. 21—The Terminal Warehouse Co. has purchased property in Guilford Avenue, adjoining its present warehouse on that thoroughfare.



## ARMY SPENDING \$2,000,000 ON WAREHOUSES IN TEXAS

Erection of 37 Storage Structures Means Abandonment of Space-Renting at San Antonio

FORT SAM HOUSTON, TEXAS, Sept. 13—The warehouse building program which the War Department has started here is on a larger scale than was originally proposed. It is authoritatively stated that the cost of the thirty-seven warehouse buildings that are to be erected will be approximately \$2,000,000. The work is under the supervision of Lieut. Col. F. G. Chamberlain, construction quartermaster. Designs for the buildings were drawn by Lieut. Herbert J. Schaefele, who is superintendent of construction for the Government.

The quantity of material to be used in the construction of the buildings is enormous, and includes 4,500,000 feet of lumber, thirty carloads or 1,250,000 square feet of corrugated iron for the roofs and sides of the warehouses, and 12,000 yards of masonry work.

When completed, the buildings will contain 600,000 feet of floor space, and there will be five acres of elevated open space for storage between the tracks. This elevated space is being built with waste dirt taken from the excavation. Each building will be equipped with an automatic sprinkler system consisting of three miles of cast iron pipe in dimensions of six and twelve inches.

Each building will have a railroad on one side and a wagon road on the other, so that supplies may be unloaded from the cars on one side and into the wagons or trucks on the other. The buildings are also so designed and laid out that permanent ones may be put up in their stead at any time.

The original contractors, the Sumner Sollet Co. of Chicago, are doing the entire work in constructing the buildings. At present they have about 175 laborers laying foundations. The work of grading and excavation for the warehouses is being done by Ririe & Montandon of San Antonio, who at the present time are employing sixty teams and about as many men. This firm will also build about six miles of wagon road and a little more than five miles of railroad around the buildings.

The group of warehouses will probably be known as the San Antonio General Supply Depot and will take the place of the rented warehouses now being used by the Government in San Antonio and vicinity.

The War Department is erecting also large warehouses at Camp Travis. It has just placed an order with the Star Clay Products Co. of San Antonio for eighty-six cars of interlocking tile to be used in the construction of warehouses.

### Barge Canal Warehouse

ROCHESTER, N. Y., Sept. 23—The State Canal Board has approved plans for the foundation of the permanent

warehouse at the Rochester terminal of the Barge Canal.

The specifications will have to be put in printed form, however, so it will be some time before this work will be open to bids, according to L. C. Hulburt, division engineer in charge of the Rochester offices of the Department of Engineering. The foundations for the new terminal will allow an inside space of four hundred by fifty feet.

Ordinarily, Mr. Hulburt states, both building and foundation would be included in the first plans, but in this case, as it is not known whether the appropriation will be sufficient to cover both, only the foundation will be bid on first.

If it is necessary, a special appropriation will be asked for the building.

## NO CHOICE

WHERE is the 1920 convention of the American Warehousemen's Association to be held? New Orleans? Atlanta? White Sulphur Springs, West Virginia?

From an apparently authentic source Distribution & Warehousing received word early in September that the majority of the directors had voted for White Sulphur Springs, with New Orleans running a close second in the balloting and with Atlanta receiving a few votes.

That such a decision had been reached is not, however, confirmed by Charles L. Criss, general secretary of the A. W. A. "The voting was badly divided, no one place having a majority," to quote Mr. Criss. "The vote as had been reported back to the directors with suggestions for prompt consideration and further action."

From other sources comes information that the merchandise members generally favored New Orleans but that the household goods warehousemen wanted White Sulphur Springs. In this connection it is recalled that the talk at the Mackinac Island convention of the newly-organized National Furniture Warehousemen's Association, a household goods body exclusively, was that the National's fall meeting should be held at White Sulphur Springs in December, which is the month when the A. W. A. and the American Chain of Warehouses always hold their meetings.

Meanwhile the Central Bureau committee of the merchandise subdivision of the A. W. A. will assemble at Louisville on Oct. 4. The committee will undertake to complete its revision of the standardization of basis for rates so that something definite can be presented at the A. W. A.'s December convention.

## LABOR-SAVING DEVICES AT ELECTRICAL SHOW

NEW YORK, Sept. 21—Labor-saving machinery adaptable to warehousing will be exhibited at the electrical exposition which is to be held at the Grand Central Palace here from Oct. 6 to 16.

The Material Handling Machinery Manufacturers' Association will have a special display, as will the Electric Hoist Manufacturers' Association. Members of the former organization who will exhibit their machine include Shephard Electric Crane & Hoist Co.; Lakewood Engineering Co. (industrial trucks); Brown Portable Conveying Machinery Co.; Baker R. & L. Co.; Oneida Truck Co. (industrial trucks); Steinmetz Electric Motor Car Corp. (industrial trucks); Terminal Engineering Co. (industrial trucks); Terry Manufacturing Co. (electric hoists); General Electric Co.; Westinghouse Electric & Manufacturing Co.; Fairbanks Co. (lathes, drill presses, etc.); Isco Corp. (refrigerating machines); and Western Electric Co. (industrial lighting).

### New Albany Warehouse

ALBANY, N. Y., Sept. 1—The Albany Terminal Warehouse Co. today took over a four-story and basement brick building which has direct track connections with the Delaware & Hudson Railroad and will use the structure for storage purposes in conjunction with the company's other warehouses. Occupying a square block, the warehouse is located two blocks from the State Barge Canal and about equal distance from the freight houses, in the center of trade.

The building has been entirely refitted and put in first class condition, according to James G. Perkins, manager. Eastern part has been leased to the National Biscuit Co. as a cake and cracker distributory and western part will be used as an adjunct to the other enterprises of the local storage company. Structure is equipped with two electric elevators. Floors are strongly built of heavy mill construction.

### Jacksonville Warehousing

JACKSONVILLE, FLA., Sept. 15—Jacksonville through its city officials is planning to open a bonded warehouse as part of the port development plans to attract shipments through the city from other parts of the country. The new municipal structure when completed will be advertised widely among the shipping interests generally.

The Chamber of Commerce announces it has been asked by an outside distributor to locate storage space of from 15,000 to 20,000 square feet. Inquiries show numerous applications for space and these cannot be met at the present time.

### Burr Expansion

WASHINGTON, D. C., Sept. 21—Burr Brothers, Inc., hauling contractors, is opening a warehouse in conjunction with its transfer business and will handle accounts for national distributors.



## RICK COMPANY TO BUILD WAREHOUSES

Also a Manufacturers' Exposition Structure at Dallas—To Encourage Distribution

DALLAS, TEX., Sept. 14—The Rick Warehouse and Stores Co. of Dallas will build a ten-story manufacturers' exposition building and a number of concrete warehouses here, according to A. C. Rick, president of the company. The exposition structure will be located upon a plot 178 by 321 feet, situated on the north side of Elm Street. The company has just purchased this land for \$87,500. The series of concrete warehouse units will be located upon a site of fifty acres recently acquired by the company. This tract is situated at the intersections of the new railway belt line and the Texas & Pacific. The plan of the company is to lease office and display space in the exposition building to manufacturers in the North and East, and to handle the stock for those manufacturers in the warehouses the company is building.

Mr. Rick said that the company would encourage the establishment of factories in Dallas by making a part of the exposition building available for light manufacturing enterprises. Needed facilities for manufacturing will be provided, and as new factories become established they will be expected to erect buildings of their own and make the space they occupy in the exposition building available for other concerns just getting started.

The downtown exposition building will provide approximately 600,000 square feet of floor space. The building will be set back twenty feet from the present building line, and the owners expect to take an active part in a movement to have Elm Street widened twenty feet from the Harwood Street intersection east. The company will maintain a sales force of its own to assist the manufacturers who maintain displays in the building.

The first warehouse unit to be constructed will provide approximately 350,000 square feet of storage space, and other units will be added as rapidly as they are needed, Mr. Rick said. The company is in touch with a number of large concerns in the North and East which have made application for display and warehouse space and will open branches in Dallas as soon as the buildings are ready. Work will be pushed as rapidly as possible, because of the acute shortage of space at the present time, Mr. Rick said.

## MOTOR TRUCK TERMINAL ORGANIZED AT ROCHESTER

ROCHESTER, N. Y., Sept. 17—Rochester will have a new motor-truck terminal that will serve as a central sending and receiving station for all freight and passenger traffic by motor truck, it is announced by men backing the Rochester Motor Bus and Truck Terminal, Inc. This new corporation, capitalized at \$125,000, was organized by Charles

O. Sawyer, of the Firestone Ship-by-Truck Bureau; H. C. Powers, president of the Great Northern Transportation Company; C. Porter Downs, attorney.

The terminal site, which has been purchased for \$10,000, is known as the Gilbert Brady estate, lying south of the Erie Canal bed and extending from Plymouth Avenue to Fitzhugh Street. The Plymouth Avenue frontage of 190 feet extends back from the canal to an apartment house, and is now occupied by a gasoline and parking station. The depth of the site along the canal is 169 feet and the southern boundary is 155 feet long. The total amount of space available is 39,270 feet.

All the motor truck lines operating in Rochester, which include seven passenger bus lines and fifteen freight carriers, are said to have signed contracts to use the station at a yearly rental. Just now there are fourteen passenger buses and twenty-five freight trucks in operation here, carrying an estimated total of 300,000 persons annually and fifty tons of freight daily. The increased business which is expected to result from the use of this central terminal will bring both these totals to a much higher point.

A stone building, now being used by a stone company, will be used for freight, and a frame building, eighty by forty feet, will be remodeled and used temporarily as a passenger terminal. The work will be rushed so that the terminal can be ready for use by Oct. 1. Schedules will be provided similar to those of the railroads.

## THE GOLD WAREHOUSE

COLORADO SPRINGS has become famed of late for its million dollar hotels and now it seems that the surprising people of that region have indeed returned to the days of the Aztecs, for we hear of a warehouse made of gold—not soft, cheesy, yellow refined gold—but the gold ore from which real gold is extracted. Located near Colorado Springs is the famous "Portland Gold Mine," which has a production record of many, many millions. In order to get ore which, in these days of high costs, is "pay-dirt," much rock must be removed, which, though it contains gold, is not now worth milling. This rock has been crushed and used in the reinforced concrete building of the Pikes Peak Warehousing Co., recently constructed in Colorado Springs.

### Warehouses for Cologne

In the London *Board of Trade Journal* we read that Cologne, Germany, is planning a port development which will include special provision for extensive warehousing projects.

## INTER-STATE ASSOCIATION MAY HAVE RATE ENGINEER

AKRON, OHIO, Sept. 24—The Inter-State Warehousemen's Association at its meeting here to-day discussed the advisability of appointing an efficiency engineer to study warehouse rates. A committee of five members was appointed further to consider the plan.

Traffic rates, cost accounting, "contract versus time and material estimate for household goods jobs" and "flat rate versus individual rate" were some of the subjects discussed at the meeting.

Charles S. Turner, president of the Moreton Truck & Storage Co., Toledo, was re-elected president. William E. Hague of the Columbus Terminal Warehouse Co. was re-elected secretary-treasurer.

W. Lee Cotter, of the Cotter warehousing system of Columbus, Akron and Mansfield, entertained the members, showing them through his three household goods and five merchandise warehouses. The members were driven to a small lake about six miles from Akron and served with a chicken and fish dinner arranged by Harry S. Knox of the Union Fireproof Warehouse Co. An evening social session was held at the Akron City Club.

## Boston Household Goods Warehouses Filled

BOSTON, Sept. 7—Some idea of the warehouse situation in Boston may be attained when it is known that nearly all are filled and in some places applicants are waiting their turn to get their goods into storage. Either Boston will soon have to build more warehouses or more homes.

It developed, at a hearing last week conducted by United States Senator William M. Calder concerning the housing situation, that no less than 6546 families in Boston have their furniture in long term storage to-day. Frederick H. Fay, chairman of the City Planning Board, gave this information.

### Death of George Allers

BROOKLYN, Sept. 23—George Allers, head of the Madison Storage Warehouse Co. here, died to-day at his home, aged 54 years.

### Terminal Company Organized

BANGOR, ME., Sept. 1—The Princeton Terminal Co. has been incorporated in Maine for the purpose of building and maintaining a terminal in the town of Princeton to connect with the right of way of the Maine Central Railroad to provide a landing and loading station for pulpwood. The company is a subsidiary of the Orono Pulp & Paper Co. and the Eastern Manufacturing Co. and the terminal will be used to expedite the handling of wood from the Eaton lands on the St. Croix waters, recently purchased from the Eaton estate of Calais. The terminal will cover thirty or forty acres.

## COTTER CO. IS CHARTERED WITH \$300,000 CAPITAL

Big Ohio Warehouse Consolidation  
Is Effected—To Install Labor\*  
Saving Machinery

COLUMBUS, OHIO, Sept. 11—The W. Lee Cotter Warehouse Co. has been chartered under Ohio laws with an authorized capital of \$300,000 to operate warehouses and to do a general transfer business. This company will be the operating concern for the six warehouses in Columbus which were taken over by W. Lee Cotter of Mansfield recently. The incorporators are W. Lee Cotter, E. B. Chappeller, A. F. Porter, F. M. Bushnell and W. G. Schwan.

At the same time the Columbus Terminal Warehouse Co., of Columbus, was incorporated with a capital of \$25,000 to take over the two warehouses on Terminal way and the two warehouses on South Park street. The incorporators in the two companies are identical.

Another development is the taking of a lease by the W. Lee Cotter Warehouse Co. on the six-story building, owned and occupied by the Walter A. Wood Mowing & Reaping Machine Co., at 32-34 Swan Street. This building adjoins the warehouse taken over by the Cotter interests from the Columbus Hay Press & Storage Co., with which it will be consolidated for the purpose of operation. The recently-acquired building is 40 x 117 ft. and six stories high, and will double the space of that plant. It is planned to incorporate the Columbus Storage Co. to take charge of these buildings, while the W. Lee Cotter Warehouse Co. will look after the operation. In connection with the lease, which is for nine years and pays a rental of \$37,352, the W. Lee Cotter Warehouse Co. will take charge of the storage and distribution of repair parts for the Walter A. Wood Mowing & Reaping Machine Co.

Officers for the various corporations recently chartered will be selected in a short time, when the organizations will be completed. W. Lee Cotter will head all of the concerns. Another development is the removal of the main offices from the Schultz Building to 32 Swan Street.

Plans have been made for extensive improvements at the various plants acquired. Arrangements have been completed for three additional stories on one of the warehouses on Terminal way. These plans are now in the hands of the city building department for approval. On the supply of cement depends when the active building operations will be started.

Machinery will be installed in all of the plants, and a large part of it already has been purchased. This equipment will consist of unloading machines, traveling elevators and other labor saving equipment.

It had been planned to call the new concern "The W. Lee Cotter Warehouse Corporation," but owing to the Ohio laws it was found necessary to use the

word "Company" instead of "Corporation." Incidentally, the company is the first in Ohio to be chartered for the distribution of merchandise, and in this connection the exact phraseology of the charter will be of interest to the industry generally. It follows:

"Said corporation is formed for the purpose of conducting, owning, operating and maintaining a general warehouse, storage, and distribution business of goods, wares, merchandise, materials, commodities, and products, subjects of barter and sale or trade and commerce, for the public generally, in the city of Columbus, Ohio, and elsewhere in the State of Ohio; To own, construct, to hold, to lease, to operate, and maintain, warehouses, storagehouses, buildings, structures, basements, cellars, places and stations to effect the storage and distribution, or either, of goods, wares, and merchandise, materials, commodities and products, subjects of barter and sale, or trade and commerce; to transport, to haul, to convey, to transfer by means of wagons, trucks, vehicles, propelled by horse power, electric, gasoline, or other motive power, boxes, barrels, crates, parcels of goods, wares and merchandise, materials, commodities, and products in whatever form shipped, conveyed or transported to effect said storage and distribution or either, and to receive goods in bulk, to store, to hold, to repack, and re-mark and make ready for shipment in smaller or larger volumes to effect said storage and distribution, or either; to engage in and to enter into contracts generally for the conveying, storing, removing, handling, transporting all kinds of goods, merchandise, material, commodities and products, subject of barter and sale or trade and commerce to effect the storage thereof and the distribution thereof, or either, and to do and perform all acts incidental to or connected therewith with the above power, for hire."

## LOUISIANA WAREHOUSE MEASURE IS VETOED

BATON ROUGE, LA., Sept. 10—Governor Parker has vetoed the warehouse bill which had been enacted by both houses of the Louisiana Legislature. His action was taken on the general ground that the bad features of the measures outweighed the good ones. It is anticipated proponents of the bill will undertake to have the bill revised so as to eliminate the points which the Governor considers objectionable, and have the measure again brought to the Legislature at the next session.

It was proposed under the act to have each bale of cotton assessed for 25 cents, the fund obtained in this way to be used to finance construction of warehouses for cotton and other agricultural products. Marketing agents handling such projects would be licensed, whether the products were produced in Louisiana or elsewhere.

### Wagner Company Builds

SPRINGFIELD, OHIO, Sept. 17—The Wagner Fireproof Storage & Truck Co. has completed a building for storing household goods. Structure will contain a carpet cleaning plant.

## CO-OPERATIVE BUYING TO HELP WAREHOUSEMEN

KANSAS CITY, MO., Sept. 21—Warehousemen here are watching with interest the development of the co-operative buying and selling idea. This idea has taken hold especially well in Kansas; and eventually it may mean a diversion of the movement of merchandise from usual channels. Possibly merchandise will continue to move through the warehouses as heretofore, since under present conditions as to availability of space, co-operative organizations cannot well establish their own warehouses. The chief change will be away from the agency of jobber distribution. The co-operative organizations in the states and districts will buy in quantities; and shipment will be made from time to time to the local branches of the state or district societies.

"Warehousemen might profitably keep in close touch with this movement," a Kansas citizen said recently. "Obviously the co-operative enterprises will need distributing facilities; and they can get them in our warehouses. We are not making a direct bid for that business. But we would be asleep if we did not see to it that the logical position of established merchandise warehouses in distribution was recognized and the facilities used."

### Not to Abolish Bonded Warehouse Keepers

WASHINGTON, Sept. 1—The Treasury Department informed *Distribution & Warehousing* to-day that "regarding the proposal to abolish United States storekeepers in bonded warehouses, after fully considering the matter the Department has decided to make no change in the present regulations or requirements in this respect."

Among the protests which the Government had received was one from the Merchants' Association of New York, which notified the Department that the proposal "is vigorously opposed by the warehousemen of New York, who see grave danger to the merchants and to the Government."

### Henry to Build

ELKHART, IND., Sept. 2—F. S. Henry, proprietor of Henry's Transfer Line, is planning to construct a fireproof warehouse located on the New York Central Railroad tracks.

### Boehl Co. Expansion

ST. LOUIS, MO., Sept. 17—The Boehl Storage and Moving Co. has purchased land on Gravois avenue between Cherokee and Arkansas and plans to improve the property with buildings and equipment so as to give the company one of the most modern plants in the city. The firm is composed of J. L. Boehl, Joseph Carroll, William Baer and others. The firm of Yeckel, Feydt and Earickson, which sold the property, will help finance the improvements.



## DIRECT DISTRIBUTION BENEFITS KANSAS CITY

**Tendency of the Shippers Is to Use Warehouses to Reach Retailers, Thereby Eliminating Jobbers**

KANSAS CITY, MO., Sept. 18—Two new tendencies in the distribution of products are noted by Kansas City warehousemen, and are commented upon without prejudice. One is the tendency of manufacturers to sell direct to their retail trade, eliminating the jobber; the other is the discovery by manufacturers that the physical distribution of their merchandise can be effected more economically through merchandise warehouses than through their own machinery.

The warehousemen do not take a position for or against direct distribution by manufacturers; they are conservative enough to wait until the experiments of eliminating the jobber are tried out, and do not dogmatically assert that the logical method of distribution by manufacturers is through merchandise warehouses. This subject has many sides; and warehousemen, different ones, stand on various sides. Some of them are acting as jobbers themselves—though they sometimes express doubts as to whether jobbing is a proper and profitable enterprise for a merchandise warehouse institution. While most jobbers have their own warehouses, much goods of jobbers are stored in merchandise warehouses.

But the warehousemen do say that the manufacturers who want to distribute direct will find the equipment of receiving, storing and shipping goods in this territory ready to serve them. The merchandise warehouses are in fact being called upon to assist the manufacturers in the distribution; building space is so scarce that manufacturers cannot promptly find and equip branch houses in which to organize their local personnel for distribution.

The second tendency, to shift the burden of physical distribution onto the merchandise warehouse, is due to two factors, one of them local. The local factor is the isolation of some of the larger manufacturing plants. A few years ago distance did not count for much, in distribution to Kansas City customers and in shipping to territory customers. Strangely enough, with the motor truck that annihilates distance has come a greater appreciation of the value of time, and of the cost of distribution. One large manufacturer who has a well organized and equipped department for local and outside delivery is now negotiating for the handling of both local and outside shipments by merchandise warehouses. The decision to turn to an expert distributor might have seemed natural enough, if it had occurred a year or so ago, when it was so difficult to get good help, and when all means of transportation were operating at low levels of efficiency. But the manufacturer has an unusually good personnel, and the work has been done in the shipping department in such a way as to be beyond criticism. But it costs too much, under

the best conditions, it seems, for a manufacturer to do his own local delivery to retailers, and his less car load shipping out of town. It is possible that this manufacturer will continue to send from his own shipping department, the carload lots, concerning which the only serious problem is switching. But the less than carload lots will probably all be sent to the warehouses, from which they will be dispatched to destinations in the territory. Details as to storage of stocks from which orders are to be made up have not been arranged. It is likely, because of scant warehouse space, that for the present the distribution of the local manufacturers' shipments will be on about the same plan as pool car distribution of goods shipped by train to Kansas City.

## WAREHOUSE BUILDING COSTS

*Does the manufacturer close down his factory and cease to produce because raw material costs more?*

*Does the importer refuse to buy because the prices are high?*

*Does the farmer cease to plant his crops because the seeds cost more and labor is high?*

"What they actually do," writes Charles H. Moores, warehouse engineer, in an article which will appear in the November issue of *Distribution & Warehousing*, "is approach the subject from a business point of view and determine how much profit they can make on the manufacture of a certain article and arrange their price in accordance with the cost, plus a profit."

"If the warehousemen will get down to brass tacks and, rather than determining offhand that a building will cost so much more money now than it would have six years ago, find out the exact cost of construction and then determine the earning power, estimate expense of operation and then compare that with the cost of earning power of the old building, a great many of them will find that the actual earning in spite of the high cost of building is greater in the new building than in the old."

*Building costs are going up, next year—not down, in Mr. Moores' opinion, and the time to build is now.*

## Pioneer Absorbs Terminal

SAN DIEGO, CAL., Sept. 1—Harold H. Moore, who has been manager of the Terminal Warehouse, carload distributors, announces that the Terminal has been absorbed by the Pioneer Truck Co. of San Diego. Mr. Moore is now manager of the San Diego Wholesale Co. He established the Terminal Warehouse six years ago.

## OHIO WOOL STORAGE MEN SEEK FEDERAL LICENSE

COLUMBUS, OHIO, Sept. 22—The Ohio Wool Growers Association, of which L. B. Palmer, of Pataskala, is president, and J. F. Walker, of Gambier, secretary, has filed an application for a Federal warehouse license for the warehousing of wool. This is said to be the first application to be made under the new rules approved by the Secretary of Agriculture, governing the application of the recently-enacted Warehouse Act.

The chief purpose of the act, which is not mandatory, is to establish a form of warehouse receipt that will be easily and widely negotiable as delivery orders or as collateral on loans, and, therefore, of definite assistance in financing wool growing.

The Ohio Wool Growers Association has secured a new warehouse on South High Street, south of the H. V. and T. & O. C. Railroad tracks. It is an old factory building, with sufficient space for the storage of an immense crop of wool, and easily accessible. This warehouse has been put into first class shape, and already a large amount of wool has been stored.

## Dallas Warehousing Congestion

DALLAS, TEX., Sept. 1—On the ground that freight is congesting Dallas warehouses, the Interstate Commerce Commission has asked the Missouri, Kansas & Texas and Gulf, Colorado & Santa Fe railroads to increase their warehousing and freight handling facilities here, according to railroad officials. Statements were made that if funds can be found for the purpose the suggested improvements will be carried out.

## TEXAS ASSOCIATION HOLDS SUMMER CONVENTION

WACO, TEX., Sept. 18—The Texas Warehouse and Transfermen's Association, comprising about forty storage companies in Fort Worth, Houston, Galveston, Beaumont, Dallas, San Antonio, Austin, Waco, Bonham, Port Arthur, Brownwood, Ennis and Wichita Falls, held its midsummer convention at the Hotel Raleigh here yesterday and to-day.

On behalf of the city of Waco the delegates were welcomed by Mayor Ben C. Richards, and S. J. Westheimer, of the Westheimer Transfer & Storage Co., Houston, president of the association, responded.

Subjects discussed included the uniform warehouse act, rental on fireproof and mill constructed buildings, cold storage, cotton warehousing, motor truck transportation costs, interurban hauling, relative hauling cartage by teams and motor trucks, less carload freight hauling and handling, labor costs, good roads and other warehousing problems.

A social program was carried through, with a lunch at the Raleigh, a theater party and ride around the city, for the ladies who accompanied the delegates to the convention.



## MOTOR TRUCK OWNERS DEVISING COSTS SYSTEMS

DETROIT, Sept. 11.—The National Team and Motor Truck Owners' Association, comprising local associations of commercial hauling concerns operating teams and motor trucks, is preparing plans which it expects will do much to stabilize the hauling industry.

F. L. Henk, secretary, has just returned here from Cincinnati, where arrangements have been made by the Cincinnati Team and Motor Truck Owners' Association to open a permanent office with a fulltime secretary. The new office will be operated along lines similar to those of the Detroit and Buffalo associations, with a truck registration board for interchange work among members, thus assuring an equitable distribution of cartage work among all members and promoting greater efficiency in truck operation. George H. Oberklein, of the J. C. Buckles Transfer Co., Cincinnati, is president of the Cincinnati association.

A simplified standard system of costs is also being worked out and a survey will be made shortly to determine accurate costs of truck operation in various parts of the country. It is only through an intelligent knowledge of the cost of operation that the evil of price-cutting can be abolished among cartage men, according to Mr. Henk.

Plans are also being made by the various local associations to arrange for snow removal from highways, so that the long-distance highway transport trucks may maintain regular service during the coming winter.

The national association is arranging through the local bodies to combat any unfair motor truck legislation which may arise when forty State legislatures convene during the early part of 1921.

As rapidly as possible local cartage associations are being formed in the larger cities of the country. Within a short time, through the formation of state associations, the national will be divided into state organization units.

### New Motor Truck Service

BRADLEY BEACH, N. J., Sept. 6.—Regular service by motor truck intended to be operated daily if sufficient business warrants was inaugurated to-day and from Newark N. J., and New York City by Anderson's Express, of Bradley Beach, in conjunction with the People's Newark and New York Express, of Newark. Storage of goods is provided for, and shippers desiring to use this service may obtain rates and other information by addressing Anderson's Express here.

### Japanese Warehousing Expands

WASHINGTON, D. C., Sept. 6.—An idea of the extent of the Japanese storage business may be obtained from statistics furnished to the Department of Commerce by James F. Abbott, United States Commercial Attaché in Japan. Stocks in seventy-seven Japanese warehouses on June 1, 1920, totaled 1,265,296,075 yen, as compared with 1,090,676,-

229 yen on May 1, 1920, and with 620,360,992 yen on June 1, 1919. A yen is equal to \$0.4985.

### Death of William Tooker

NEW YORK, Sept. 8.—William Tooker, superintendent of the Baker & Williams Storage Warehouses, died of heart disease to-day in his office at 265 Washington Street.

## WAREHOUSE CONSTRUCTION

ONE of the "industrial questions" which the Fidelity and Deposit Company of Maryland, a Baltimore institution, asked in a recent nation-wide canvass among leading wholesale and retail merchants, manufacturers, bankers, professional men, farmers and industrial leaders, was:

"In what class of the following buildings is the greatest activity [in building operations] manifest: (a) Warehouses and factories; (b) office buildings and stores; (c) low-priced dwellings; (d) high-grade dwellings and apartments?"

The replies showed that in New England, warehouses rank first, factories second and stores third. In the Middle Atlantic States, warehouses rank first, factories second, low-priced dwellings third. In the East North Central States, warehouses rank second to low-priced buildings, with factories third. In the South Atlantic States, the order is warehouses, factories, low-priced dwellings. In the East South Central section, warehouses run second to low-priced dwellings, with factories third, and the same is true in the Pacific States. In the West North Central, West South Central and Mountain sections, the replies show, there has not been enough activity in warehouse construction to have warehouses rank among the first three classes.

Franklin K. Lane, former Secretary of the Interior, has declared that this survey, which takes in industrial, agricultural, financial and political conditions generally, affords "as clear and valuable a conspectus" of those conditions as can be gathered.

### Warehouse Fire

JACKSONVILLE, FLA., Sept. 1.—Warehouse of the Ellis Moving & Storage Co., in State Street, suffered about \$10,000 damage to-day from fire.

## 8 ARMY WAREHOUSES FOR COMMERCIAL USE

WASHINGTON, Sept. 4.—Eight of the best equipped port terminals, wartime developments, were to-day turned over by the War Department for use by private shipping concerns. They will be leased on terms which will reimburse the Government for interest on the original investment and depreciation, the leases to be subject to military requirements at any time when the United States might engage in war.

Each of the bases, located at Boston, Brooklyn, Newark, Philadelphia, Baltimore, Norfolk, Charleston and New Orleans, has warehouses, three or more piers and material handling machinery.

### New Jersey Association Meets

NEWARK, Sept. 29.—W. R. Wood, manager of the Liberty Storage & Warehouse Co., New York City, and Robert Ferguson, an insurance expert, were guests and speakers at the September meeting of the New Jersey Furniture Warehousemen's Association. Mr. Wood discussed warehouse cost accounting, of which he is a student, and Mr. Ferguson offered advice and gave information regarding mutual insurance.

It was brought out at the meeting that enactment of a bill now before the New Jersey State Senate would hit the warehousing industry hard by increasing motor truck license fees. It was decided to have motor truck representatives at the Oct. 20 meeting of the Association with a view to planning a fight against the bill.

### California Draymen Meet

LOS ANGELES, Sept. 25.—Delegates owning 14,000 motor trucks representing an investment of \$6,000,000 attended to-day a convention here of the California State Draymen's Association. Eighty per cent. of all California truck owners are members.

W. A. Hicks, president of the Capital-Sacramento Transfer, Van & Storage Co., was elected president. Milo W. Bekins, Bekins Van & Storage Co., Los Angeles, was re-elected treasurer. C. R. Collins, San Francisco, was again chosen secretary and manager.

Speakers at the convention included Mr. Collins, who discussed optimistically the motor truck and highway conditions in California; and Judson M. Davis, president of the Lyon Fireproof Storage Co., Los Angeles.

### Increased Warehouse Rates

STOCKTON, CAL., Sept. 1.—The State Railroad Commission has granted rate increases for storing and handling commodities to the following Stockton warehouses:

California Wharf & Warehouse Co., California Navigation & Improvement Co., California Packing Corp., Dickinson-Nelson Co., Girvin Warehouse Co., and Union Ice & Storage Co.

These firms had asked advances on the ground of higher costs of labor, materials and incidental expenses.

## THAT DOLLAR IDEA!

Read page 24 and write!

# WAREHOUSING NEWS

What's going on in your town?

The industry wants to know!

## NEW BUILDINGS, ETC.

**Pennsylvania Warehousing & Safe Deposit Co.**, Philadelphia, plans to erect 5-story and basement brick and concrete warehouse at 414-416 South Water street.

**Independent Warehouses, Inc.**, New York City, has added another unit to its system by acquiring stores of the W. C. Casey Co. at 151-159 Leroy street, 362-364 West street and 600-604 Washington street.

**Gaston, Williams & Wigmore, Inc.**, New York City, has removed from 29 Broadway to 100 West 41st street.

**New York Dock Co.**, Brooklyn, has leased 4-story warehouse, containing 20,000 square feet, at Van Brunt and Browne streets, to Harris Glass Co. and Pacific Bottlers Supply Co. of Seattle for five years, as an eastern distributing depot. Warehouse has rail and water service.

**Great Northern Warehouses, Inc.**, Syracuse, N. Y., has purchased property westerly from present building to South West street, for reported cost of \$100,000. Acquisition gives company an entire half-block.

**Huntington Wharf & Storage Co.**, Huntington, West Va., plans to construct an additional warehouse to provide room for increasing river shipments.

**Henry Coburn Storage & Warehouse Co.**, Indianapolis, has increased capital stock from \$200,000 to \$300,000.

**Columbia Avenue Pier Co.**, Philadelphia, is erecting 2-story warehouse at Beach street and Columbia avenue.

**Modern Storage Rooms**, Newark, N. J., has leased 3-story brick building at Orange and Ogden streets for use as a merchandise warehouse.

**George L. Wright**, Santa Ana, Cal., is completing \$10,000 public storage warehouse, 50 by 100 feet.

**Pacific Steamship Co.**, Los Angeles, has applied to Harbor Commission for permission to build another warehouse, at Pier A, to cost \$35,000.

**Republic Storage Co.**, New York City, has leased 6-story building at 539-545 West 34th street, for long term of years from Coastwise Warehouse, Inc.

## INCORPORATIONS

**Jackson Operating Co.**, New York City. To engage in warehousing. Capitalization, \$10,000. Incorporators, H. A. Jackson, C. C. Jackson and L. A. Seeley.

**Conneaut Transit Co.**, Conneaut, O. Capitalization, \$20,000. General transfer and storage. Incorporators, W. A. Fuller, C. G. Fuller, Carolyn C. Fuller, Effie M. Fuller and Bessie F. Johnson.

**Davis Cartage Co.**, Lakewood, O. Capitalization, \$10,000. General transfer of merchandise and household goods. Incorporators, Russell Wayne Davis, Edward Stanley Brubaker, Gilbert Morgan, L. M. Sewell and E. W. McGraw.

**Transit Elevator & Warehouse Co.**, Bellevue, O. Capitalization, \$10,000. General merchandise warehousing, with grain elevator. Incorporators, A. M. Tousley, W. J. Mahnks, Charles Ammerman, P. E. Bunnell and H. A. Brady.

**Campbell & Rice Warehouse Co.**, New York City. Capitalization, \$10,000. Storage and forwarding. Incorporators, C. J. McCann, T. J. Campbell and J. P. Rice.

**Kaderback Warehouse Corp.**, Buffalo. Capitalization, \$10,000. Incorporators, D. E. Kline, H. A. Kam, G. J. Kaderback.

**Williams Storage Co.**, New York City. Capitalization, \$5,000. Incorporators, P. R. Hanley, J. O'Connor, F. C. Thompson.

**Greenwood Equity Warehouse Association**, Greenwood, Wis. Capitalization, \$8,000.

**Navonne Bros.**, New York City. Capitalization, \$50,000. Storage and warehousing. Incorporators, M. A. Kent, J. Navonne, E. Navonne.

## Harvester Warehouse

**LOUISVILLE, KY.**, Sept. 1—Based on reports, it is understood, of Louisville's position as a rate-breaking center, plans prepared by the International Harvester Co. are for construction of a five-story concrete warehouse at 14th and Walnut streets, to serve as a distributing center. Cost would be approximately \$500,000.

## Columbus Co. Removes

**COLUMBUS, O.**, Sept. 10—The Capital City Trucking Co., of which John W. Hall is president, has removed its headquarters from Chestnut and Third streets to larger quarters at 221 East Long St.

The company does a general trucking and transfer business and engages in long distance haulage.

## Vehicular Tunnel

**NEW YORK**, Sept. 1—Actual work on constructing the vehicular tunnel under the Hudson River between New York and New Jersey is expected to be put under way on October 12 as part of the Columbus Day celebration.

President Wilson, the Governors of New York and New Jersey and the Mayors of New York City and Jersey City have been invited to attend the ceremonies. Completion of the tunnel will tend to reduce lighterage charges in the metropolitan harbor.

## ORGANIZATION PLAN FOR COLD STORAGE INTERESTS

**ATLANTIC CITY, N. J.**, Sept. 24—When the American Warehousemen's Association meets in December the cold storage sub-division will have before it for consideration plans formulated here to-day for the creation of what would be known as the American Association of Ice and Refrigeration. Important ice and refrigeration interests, including cold storage warehousemen, would organize a confederation, under the plans discussed here, and eventually some 2500 corporations and firms would be included in the membership.

At the meeting here Frank A. Horne, of the Merchants' Refrigerating Co., New York City, a member of the American Warehousemen's Association and president of the American Association of Refrigeration, presided. Among the warehousing interests represented was the New York State Cold Storage Association.

## Philadelphia Planning Warehouses

**PHILADELPHIA**, Oct. 20—Conferences are under way here between officials of the Board of Trade and a firm of consulting engineers looking toward development of a system of warehouses along the lower river front.

## BEGIN THE CAMPAIGN

### FOR SNOW REMOVAL

(Concluded from page 17)

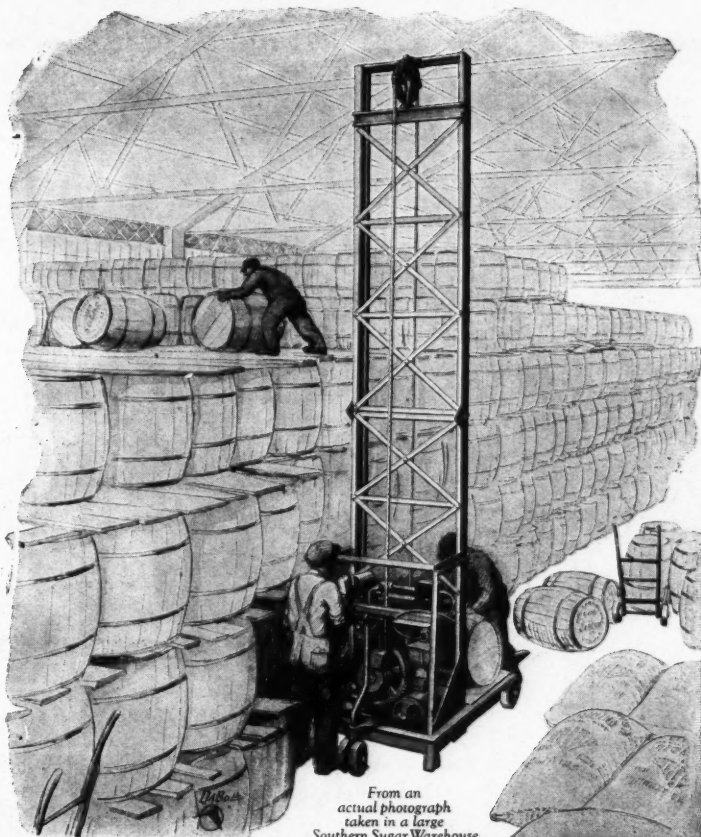
shoveller should be eliminated wherever practicable. Motorized plows, mechanical loaders, steam shovels and other forms of contractors' equipment which is usually idle during the winter months should be employed to the greatest possible extent.

## Southern California Is Busy

**LOS ANGELES**, Sept. 1—If household goods and merchandise continue to arrive in this part of California at the same rate as they have been reaching here during the past six months, the warehousemen will be in a quandary as to how to handle the shipments.

In anticipation of a large volume of business between Los Angeles and San Francisco the Bekins Fireproof Storage of this city has put into service two new 3½-ton Packard motor trucks, with pneumatic tires and with extra large motors for rapid service.





From an  
actual photograph  
taken in a large  
Southern Sugar Warehouse

## The Low Cost of High Storage

**U**P, UP, up they go—six high, straight up. Men alone could never put them there. But with the Economy Electric Portable Elevator it is easily and quickly done by a very small crew.

No space is wasted here. From wall to aisle, right up to the limit, every cubic foot of space earns its share of the warehouse cost.

In more than a hundred different

lines of industry, barrels, boxes, bags, bales—all kinds of packages—are stored with notable economy by this storage handling system devised and built by the Economy Storage Engineers.

Whether your storage space is large or small, if you are not making fullest use of it, our free booklet, "Economy in Storage," will perhaps show how you can do so.

See our exhibit at the Sixth National Exposition of  
Chemical Industries, Grand Central Palace, New York, Week of September 20th

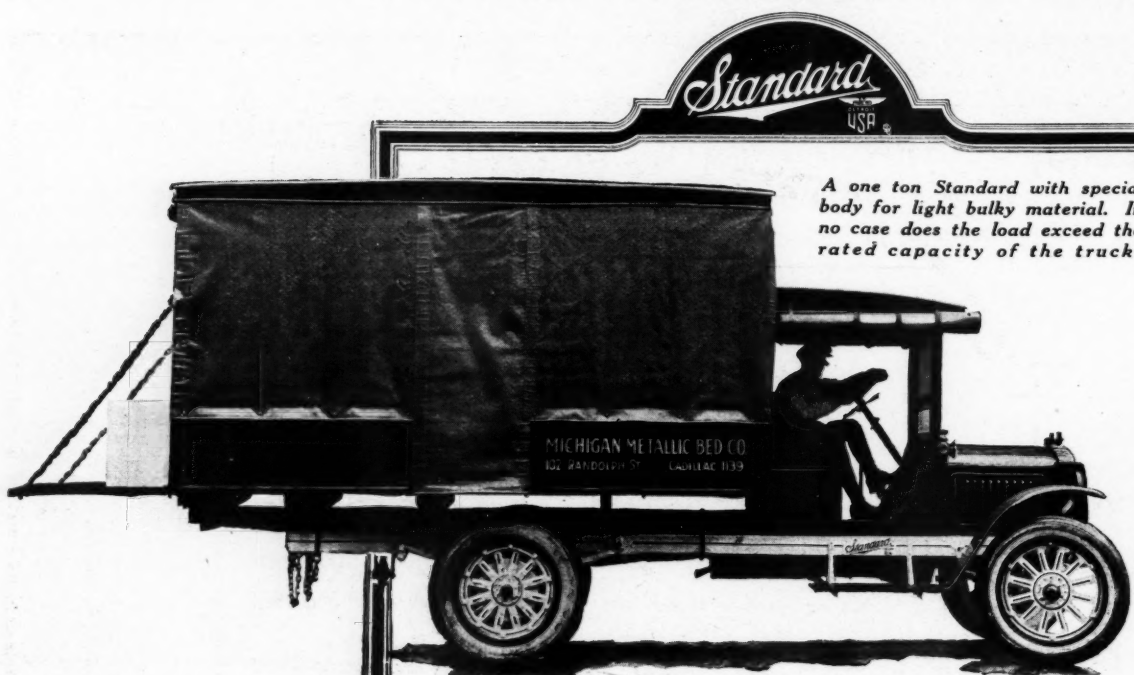
The **ECONOMY**  
SYSTEM

**ECONOMY ENGINEERING COMPANY**  
2661 West Van Buren Street, Chicago, U. S. A.  
BOSTON NEW YORK PHILADELPHIA DETROIT ATLANTA SAN FRANCISCO

How much space  
are YOU wasting?

# ECONOMY PORTABLE ELEVATORS and STORAGE RACKS





## Integrity

When you buy a STANDARD motor truck, you have the assurance it embodies the latest improvements in motor truck design and practice. Our engineers make thorough tests before changes in our Models are made.

This policy has been adhered to since the first STANDARD was constructed. As a result, the Standard Motor Truck Company has grown consistently and continuously during the ten years of its existence.

STANDARDS have proven their integrity to the satisfaction of many owners. A STANDARD truck will help you in the permanent solution of your haulage problem. Every STANDARD dealer is familiar with local conditions, and can recommend the proper model for your use. The name of the nearest STANDARD dealer furnished on request.

**STANDARD MOTOR TRUCK COMPANY**  
**DETROIT**

All the name implies

**Standard** **MOTOR**  
**TRUCKS**

MADE IN  
DETROIT  
USA

Registered

Awarded Gold Medal in the International Trials, June 21 to 26, 1920, Barcelona—Madrid, Spain



# YOU!

## Give Us a Trial

**YOU**, the tire user, and I, the man who sells you your tires, are in the same boat. I must sell quality; you must get quality. Otherwise our business relations would not exist very long.

For economy, speed, and all-round successful hauling, facts have proven that the U. S. 'NOBBY' CORD PNEUMATIC TRUCK TIRE heads the pneumatic tire list.

For the heavy load where safety of the burden is the main issue, the UNITED STATES 'MONO-TWIN' SOLID TRUCK TIRE has distinctive merits that place it in a class by itself.

*'Nobby Cord'*



*Mono-twin*



**United  
States  
Tires**  
are Good Tires





## The Warehouse Industry Acquires Prestige

What Procter & Gamble are doing, as announced in "Distribution and Warehousing" last month, many of the leading manufacturers wish they might do. The time is coming when all staple articles can, and will be sold direct from producer to consumer, *provided* adequate means of handling and distributing these commodities through the public warehouses are available.

It is up to ALL warehousemen of the country—not just a few concerns here and there—to improve their facilities and methods to a standard of service that will insure the success of this forward movement in commercial expansion. You can ill afford to fall down on your end of a proposition that guarantees an immense increase of business for you, and is of great value to society.

A Modern Fireproof Warehouse is unquestionably your first requirement. What capacity it ought to have; what handling devices it requires; what it will cost; how it is to be financed; what the returns will be—these are some of the questions that may be puzzling you. **WE SOLVE ALL SUCH PROBLEMS**, as well as design the structure, draw the plans, prepare the specifications, assist you if desired in letting contracts and purchasing materials, and supervise the construction of the building.

A golden opportunity—"GOLDEN," is right—is before you; but you cannot always get away with it on a bluff. It is time to look ahead to the day when you will be obliged to *seek* business on your merit; rather than have it wished upon you regardless of your facilities, as at present.



Specialists in warehouse design and maintenance and supervision of warehouse construction.

**Moores & Dunford  
Engineering Corporation**

744-46 First National Bank Building  
CHICAGO



# Shippers' Index

A Guide to representative Merchandise, Cold Storage and Household Goods Warehouses, Forwarders, Terminals, and Transfer Companies, arranged by States and Towns

## The Meeting Place of Shippers and Warehousemen

**O**NE of the largest national distributors, manufacturing a product known the world over, just announced that hereafter it will distribute exclusively through warehouses. In the selection of the warehouses to be used, *DISTRIBUTION & WAREHOUSING* has had an important part. This distributor, like hundreds of others of similar calibre, is a regular reader of *DISTRIBUTION & WAREHOUSING* and uses the *Shippers' Index* as a guide and source of information in the selection of the warehousemen with which to do business.

The importance of the *Shippers' Index* as an active factor in the industry is rapidly increasing, as is evidenced by the fact that it is today made up of the announcements of nearly twice as many of the leading warehouse companies, freight terminals, reshippers and forwarders as were represented in it one year ago. The growth of this section of *DISTRIBUTION & WAREHOUSING* is still continuing at a rapid rate.

The *Shippers' Index* of *DISTRIBUTION & WAREHOUSING* is the meeting place of the man who needs warehouse facilities and the man who has them to offer.

## COMING EVENTS

### Meetings Scheduled by Associations in the Industry

|                                                         |                                                                       |
|---------------------------------------------------------|-----------------------------------------------------------------------|
| Central Warehousemen's Club.....                        | San Antonio (tentative).<br>December or January                       |
| National Furniture Warehousemen's Association.....      | White Sulphur Springs, W. Va.<br>(tentative) ..Probably December      |
| American Warehousemen's Association.....                | Atlanta, New Orleans, or White<br>Sulphur Springs, W. Va.<br>December |
| American Chain of Warehouses.....                       | Atlanta, New Orleans, or White<br>Sulphur Springs, W. Va.<br>December |
| Southern Furniture Warehousemen's Association.....      | Memphis.....(Date not fixed)                                          |
| Pacific Coast Furniture Warehousemen's Association..... | San Diego.....February, 1921                                          |
| Montana Transfer & Storage Men's Association.....       | Great Falls.....February, 1921                                        |
| National Association of Commercial Haulers.....         | Milwaukee .....March 21, 1921                                         |
| New York State Cold Storage Association.....            | (To be decided).....June, 1921                                        |
| Shippers' Warehousing and Distributing Association..... | (To be decided).....July, 1921                                        |

**BIRMINGHAM, ALA.****HARRIS TRANSFER  
AND WAREHOUSE COMPANY**

(Equipped to Handle Anything)

**MODERN FIREPROOF WAREHOUSE**

Special Attention Given to Packing and Shipping

When shipping to Birmingham, consign goods to Harris  
—he will look after your interests, also those  
of your customer

Offices: CHAMBER OF COMMERCE BLDG.

**LOS ANGELES, CAL.****Fidelity Fireproof Storage**

1836 Arapahoe Street, Los Angeles, Cal.

Intelligent and forceful supervision of all  
business intrusted to us.

We have a seven-story reinforced concrete  
warehouse.

We consolidate and solicit distribution of con-  
solidated cars of household goods.

Frank Robert Palmateer, Prop.

**MOBILE, ALA.****Acme Transfer and Storage Co.**

209-211 N. Royal St.

Distribution

Transfer  
Pool Cars**"Service"**Forwarding  
Storage

Household Goods

Mobile, Ala.

**LITTLE ROCK, ARK.****WAREHOUSING  
AND FORWARDING**

Distributors of Pool Cars, Parcel Post Catalogs and  
Merchandise

**TERMINAL  
WAREHOUSE COMPANY**

109-111 RECTOR AVENUE

All track connection

**LOS ANGELES, CAL.**

We Solicit Your

**LOS ANGELES  
Shipments**

assuring you that same will receive prompt  
and efficient handling.

Collections and other matters intrusted to us  
will receive prompt and efficient attention. If  
you desire send your collections draft attached  
to bill of lading.

We operate three warehouses.

We have private railroad siding at warehouse  
No. 3 connecting with all lines. No switching  
charge on cars consigned in our care.

*We desire to please.***PRUDENTIAL STORAGE & MOVING CO.**

941 West 16th Street

LOS ANGELES, CAL.

Household Goods Exclusively

Members So. California Drayman's Association

**BERKELEY, CAL.****STUDENTS  
TRANSFER & STORAGE CO.**

MOVING  
STORING  
FORWARDING

2132 SHATTUCK AVENUE

**EL CENTRO, CAL.  
IMPERIAL VALLEY****PIONEER TRUCK and CO.**

Warehouse: S. E. Cor. 3rd &amp; State Sts. Office: 120 N. 5th St.

Only Re-inforced Concrete Warehouse for Storage and Carload  
Distributing Throughout the Whole Imperial Valley.

Daily Truck Service to All Valley Towns.

Our Stock in Trade, SERVICE.

The Men Who Distribute

**Colgate Laundry Soap**

Read DISTRIBUTION & WAREHOUSING  
and consult the Shippers' Index

The Men Who Distribute

**Carter Inx**

Read DISTRIBUTION & WAREHOUSING  
and consult the Shippers' Index

## LOS ANGELES, CAL.

## Shattuck & Nimmo

WAREHOUSE CO.

### Storage and Distribution

Of All Non-Perishable Commodities

All cars handled at our own plant. No switching charge if cars are consigned in our care.

Manufacturers and forwarders consolidating car loads for Pacific Coast distribution are assured of efficient service and prompt returns.

## MEMBERS

Pacific Coast Furniture Warehousemen's Association, American Chain of Warehouses, National Distributing Division, Local Rotary Club and Chamber of Commerce

## OAKLAND, CAL.



## SACRAMENTO, CAL.



The Men Who Distribute

### "None Such" Mince Meat

Read DISTRIBUTION & WAREHOUSING and consult the Shippers' Index.

The Men who Distribute

### "Jello"

Read DISTRIBUTION & WAREHOUSING and consult the Shippers' Index.

## LOS ANGELES, CAL.

**Lowest Insurance**  
**Safety**  
**Prompt Reports**



**Moderate Rates**  
**Satisfactory Service**  
**Car Load Distribution**

The location of the above pictured building, one of our four warehouses in Los Angeles, is in the Wholesale Terminal, the largest plant of its kind in the world, where practically all the wholesale business of the city is conducted. A similar building is now under construction to be completed about March 1st, 1921. We are now accepting applications for space in same.

If you are contemplating using warehouse space on the Pacific coast or are dissatisfied with your present service, write for our rates on your requirements. Our service is guaranteed.

**UNION TERMINAL WAREHOUSE CO.**



## SAN FRANCISCO, CAL.

## We Solicit Your Pool Car Distribution



### OUR SAN FRANCISCO WAREHOUSE

When you Ship to California  
Remember to Ship to

### BEKINS FIREPROOF STORAGE

Prompt and Intelligent Returns,  
Your Customers Satisfied

Los Angeles  
1341 Figueroa St.

Oakland  
22d & San Pablo

San Francisco  
13th and Mission St.

## SAN FRANCISCO, CAL.

## HASLETT WAREHOUSE CO., THE

228 Pine Street, San Francisco

Will handle your interests in the Far West with excellence of service that has grown from years of experience in California territory.

### Some Haslett Helps For You

We will store or forward your merchandise.  
We offer also U. S. Customs and Tea Bonded Storage.  
Yard storage provided. Public Weighers.  
Warehouse receipts issued—collections made.  
Pool car distributing and reforwarding a specialty.  
Drier, cleaner and fumigator for beans, corn and other grains.  
Light hauling, city deliveries and general truck service.  
Handy location to retail districts and to freight stations.  
Low insurance rates.  
Every form of time-saving equipment.  
Any special service a client desires will be given personal and immediate attention.  
Coffee hulling, conditioning and hand picking.  
Track connections with all lines.

S. M. Haslett, President P. E. Haslett, Secretary

## SAN FRANCISCO, CAL.

NO TASK TOO GREAT  
**LAWRENCE**  
WAREHOUSE COMPANY  
NO DETAIL TOO SMALL



## DENVER, COLO.

## THE KENNICOTT-PATTERSON TRANSFER COMPANY

OFFICE: 1509 GLENARM PLACE

Transfer and storage of merchandise and household goods.

Distribution of pool cars given special attention. Complete fleet of Motor Trucks in addition to wagon equipment. Every modern facility for handling heavy machinery, safes, boilers, smokestacks, etc.

Packing household goods and pianos and consolidating in car lots east or west at reduced rates a specialty.

## DENVER, COLO.

## THE WEICKER TRANSFER & STORAGE COMPANY

Office, 1017 Seventeenth Street

New Fireproof Warehouse on Track

Storage of Merchandise and Household Goods

Distribution of Car Lots a Specialty

Every Facility for Handling Safes, Boilers and Heavy Machinery. Complete Fleet of Motor Trucks and Modern Equipment

Members { American Warehousemen's Association  
Illinois Furniture Warehousemen's Association  
New York Furniture Warehousemen's Association  
Pacific Coast Furniture Warehousemen's Association  
Central Warehousemen's Club  
American Chain of Warehouses  
Southern Furniture Warehousemen's Association

## HARTFORD, CONN.

Tel. Connection Office: 335 Trumbull St.

Safety Vaults for Silverware

## GEORGE E. DEWEY & CO.

JOSEPH M. PELCHAT Proprietor

Local and Long Distance

FURNITURE AND PIANO MOVING

Packing, Crating and Shipping of  
PIANOS, FURNITURES, CHINA

Only Fireproof Storage Warehouse in Hartford

## HARTFORD, CONN.

## The Roger-Sherman Transfer Co.

Freight Forwarding—Moving

TEAMS  
AUTO-TRUCKS

GENERAL TRUCKING  
HEAVY RIGGING

1056 MAIN ST.

## NEW LONDON, CONN.

## B. B. Gardner Storage Co., Inc.

18 BLACKHALL STREET

PIANO AND FURNITURE PACKER, MOVER  
AND SHIPPER

Safe Mover—Freight and Baggage Transfer—STORAGE

## WATERBURY, CONN.

**The Ralph N. Blakeslee Co.**

TRANSFER AND STORAGE

Special Facilities for Moving Heavy Machinery and Safes

Storage Warehouse for Merchandise

Separate Apartments for Furniture

## JACKSONVILLE, FLA.

**Wiesenfeld Warehouse Company**

P. O. Box 1133

General Merchandise Storage and Distributing

References:

Any bank, jobber or transportation man in the city

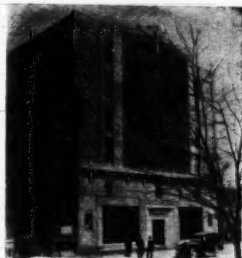
## WASHINGTON, D. C.

**SMITH TRANSFER  
& STORAGE CO.**

OFFICE:

1313 YOU ST., N. W.

MODERN FIREPROOF BUILDING

MOVING  
SHIPPING  
STORINGLET US HANDLE YOUR WASHINGTON  
BUSINESS. WE WILL PLEASE YOU

MEMBERS N. F. W. A.

## MIAMI, FLA.

**The John E. Withers Transfer &  
Storage Co., Inc.**will give your shipments careful attention. Fireproof Warehouse.  
Facilities for distribution of pool cars. Moving, packing, ship-  
ping and storing Household Goods.

Private Trackage

Motor Equipment

Cor. Ave. C and 2nd St., Miami, Fla.

## PENSACOLA, FLA.

**Ferriss Warehouse & Storage Co.**

HARRY P. FERRISS, PRES.

Receiving and Warehousing of General Merchandise in car-  
loads or less than carloads.Merchandise stocks carried and records kept for out-of-town  
concerns.

Cor. Chase &amp; Alcine Streets

## WASHINGTON, D. C.

**UNITED STATES STORAGE CO.**

418-420 TENTH STREET, N. W.

MEMBERS:

N. Y. Furniture Warehousemen's

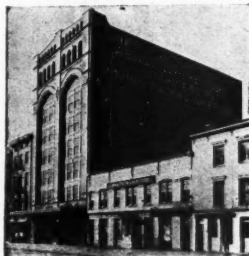
Association

Illinois Furniture Warehousemen's

Association

Southern Furniture Warehousemen's

Association

PROMPT REMITTANCES  
Efficient and Courteous Service

MOTOR TRUCKS

and

PADDED VANS

Modern Fireproof Warehouse

## ATLANTA, GA.

**CATHCART****VAN & STORAGE COMPANY**

Moves, Stores, Packs, Ships

Household Goods Exclusively

THREE WAREHOUSES

Office, 6-8 MADISON AVE.

## ATLANTA, GA.

Warehousemen

**MORROW****TRANSFER & STORAGE COMPANY**

COMMERCIAL STORAGE

Distributors—R. R. Trackage—Carloads a Specialty

Household Goods Moved, Stored, Packed and Shipped

180-184 MARIETTA STREET

## JACKSONVILLE, FLA.

**DELCHER BROS. STORAGE COMPANY**

FIREPROOF WAREHOUSE

We Move, Pack, Store and Ship Furniture

Consign Your Pool Cars to Us.

Motor Equipment

## ATLANTA, GA.

**SOUTHERN****SALES & WAREHOUSE CO.**

FIRE PROOF CONCRETE WAREHOUSE

MERCHANDISE DISTRIBUTORS

R. R. TRACKAGE, MOTOR SERVICE

Located in heart of wholesale district.

13 Produce Place

## JACKSONVILLE, FLA.

**UNION TERMINAL  
WAREHOUSE COMPANY**

EAST UNION and IONIA STREETS

55 Rental Compartments

Track Capacity 52 Cars

Building of reinforced concrete with sprinkler system.  
Low Insurance Rate. Sub-Post Office and branch  
Western Union Telegraph. Joint Railroad Agent.  
L.C.L. freight loaded direct for line of road.GENERAL MERCHANDISE STORAGE  
AND FORWARDING

Special attention to handling of pool cars.

## SAVANNAH, GA.

**Savannah Bonded  
Warehouse and Transfer Co.**

General Storage—Re-Consigning

Distributing—Forwarding

Prompt and Efficient Service

Exceptional Facilities

Custom House Brokers

Track Connections with all Railroads and  
Steamship Docks

Members American Chain of Warehouses

Members American Warehousemen's Association

R. B. YOUNG, President

312-314-316 Williamson Street

P. O. Box 985

Savannah, Ga.

BOISE, IDAHO

**PEASLEY**  
**TRANSFER & STORAGE COMPANY**  
 STORAGE, TRANSFER AND FORWARDING  
 NINTH AND GROVE STREETS

CHICAGO, ILL.

**BEKINS**  
**HOUSEHOLD SHIPPING COMPANY**  
 Reduced Rates on Household Goods, Automobiles  
 and Machinery  
 General Offices, 805 BEDFORD BLDG., Chicago  
 NEW YORK, BOSTON, BUFFALO, CINCINNATI

CHICAGO, ILL.

**CENTRAL**  
**Storage & Forwarding Company**  
 39th & Robey Streets  
*General Merchandise Warehouses*

Modern, Fireproof Buildings; Lowest Insurance Rates;  
 Track Space for Sixty Cars.

Located on the Chicago Junction Railroad, which has  
 direct connections with all trunk lines entering Chicago.  
 Our switching service is unexcelled. A universal freight  
 station in operation on our premises guarantees the most  
 rapid handling of outgoing L. C. L. shipments.

CHICAGO, ILL.

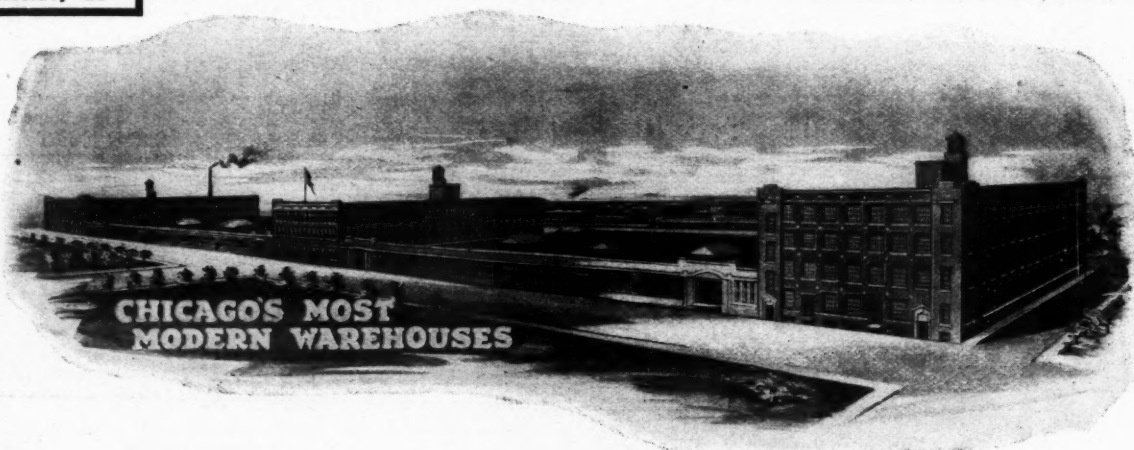
**Currier-Lee Warehouse Co.**  
 427 West Erie St., Chicago, Ill.

**MERCHANDISE**  
**STORAGE EXCLUSIVELY**  
 MODERN BUILDINGS  
 CONVENIENT LOCATION  
 UP-TO-DATE METHODS  
 ADEQUATE FACILITIES  
 LOW INSURANCE RATES  
 EXPERIENCED EMPLOYEES

The Men Who Distribute  
**Scott's Emulsion**  
 Read DISTRIBUTION & WAREHOUSING  
 and consult the Shippers' Index

The Men Who Distribute  
**United Drug Products**  
 Read DISTRIBUTION & WAREHOUSING  
 and consult the Shippers' Index

CHICAGO, ILL.



## Insure Prompt Deliveries

**CARRY A STOCK NEAR YOUR TRADE**

Our modern warehouses containing 350,000 square  
 feet of floor space are completely equipped with  
 Sprinkler System.

Ship direct to us and let us fill and reship your  
 orders. L. C. L. shipments made without cartage  
 expense.

**INSURANCE RATES AS LOW AS 15c** **NEGOTIABLE RECEIPTS ISSUED**

*Take Advantage of the Rates in Transit*

**FLOOR SPACE WITH OFFICES TO RENT**

**BUILDINGS ERECTED TO SUIT TENANTS' REQUIREMENTS**

*Carload Shipments Made on Telegraphic Orders*

**CHICAGO STORAGE & TRANSFER CO.**

5835 West 65th Street, Chicago, Ill.



CHICAGO, ILL.

# EMPIRE

## Storage Company

Fireproof Warehouses

A DISTINCTIVE ORGANIZATION

by reason of

Unusually careful attention to safeguarding of correspondents' interests.

Immediate remittance of charges advanced.

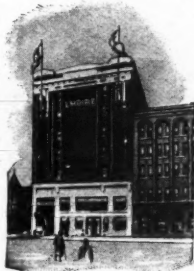
Liberal treatment of customers' complaints.

Proximity to Belt Switch Tracks, receiving freight from all trunk lines.

Central Office

52nd St. and Cottage Grove Ave.

Member: Nat'l F. W. Ass'n, 111 F. W. Ass'n.



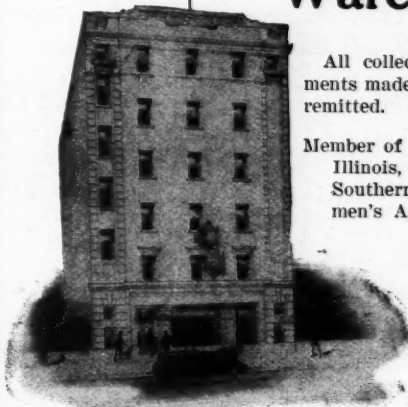
Established 1891

CHICAGO, ILL.

ESTABLISHED 1874

# HEBARD

## Storage Warehouses



All collections on shipments made to us promptly remitted.

Member of

Illinois, New York and Southern Warehousemen's Associations.

Our Seventh Warehouse

on 6331-33 Broadway, near Devon Avenue, which will handle all Rogers Park or North Shore shipments.

Warehouses A-B-C-D, West Side, Ogden and Winchester Aves.  
Warehouses E-F, North Side, Sheridan Road and Sheffield Ave.  
Warehouse G, North Side, Broadway near Devon Ave.

CHICAGO, ILL.

Our new concrete, sprinklered warehouses with direct switching from five Truck Lines and one Belt Line will be ready for occupancy about September 1st.

We will then be able to take on additional distribution and storage business.

## Griswold & Walker, Inc.

Main Office: 1501 South Peoria Street, Chicago

CHICAGO, ILL.

Very Low  
Insurance Rates

CM&STP Ry. Track  
Inside Buildings

## The Ontario Warehouse Co.

Frostproof  
Merchandise Storage

We specialize in the handling of Foodstuffs—our location being very convenient for distribution to wholesale grocers and jobbers.

CHICAGO, ILL.

## Railway Terminal & Warehouse Company

444 W. Grand Ave.

## Merchandise Storage

Located in the heart of the wholesale district. Especially convenient for the warehousing of spot stocks for distribution among the wholesale grocers.

Side track facilities with free switching from all railroads entering Chicago.

Modern Building—Low Insurance Rates  
Use Our Service

The Men Who Distribute

## Lux and Rinso

Read DISTRIBUTION & WAREHOUSING  
and consult the Shippers' Index

The Men Who Distribute

## Log Cabin Maple Syrup

Read DISTRIBUTION & WAREHOUSING  
and consult the Shippers' Index

CHICAGO ILL.

# WAKEM & McLAUGHLIN

(INCORPORATED)

## CHICAGO

**We Store and Distribute Merchandise Only**

CHICAGO, ILL.

Member American Warehousemen's  
Association, Illinois Association  
of Warehousemen

ROBERT L. SPENCER  
Warehouse Superintendent  
Pennsylvania System

# WESTERN WAREHOUSING CO.

## General Merchandise Warehouses

### POLK STREET TERMINAL, PENNSYLVANIA SYSTEM, CHICAGO

#### WHERE WE ARE:

At the edge of "The Loop," Chicago's downtown business center.

#### WHAT WE HAVE:

500,000 square feet of floor space.  
Track capacity, 60 cars daily. New concrete, fire-proof building. Insurance rate, 18.9c per \$100 per annum.

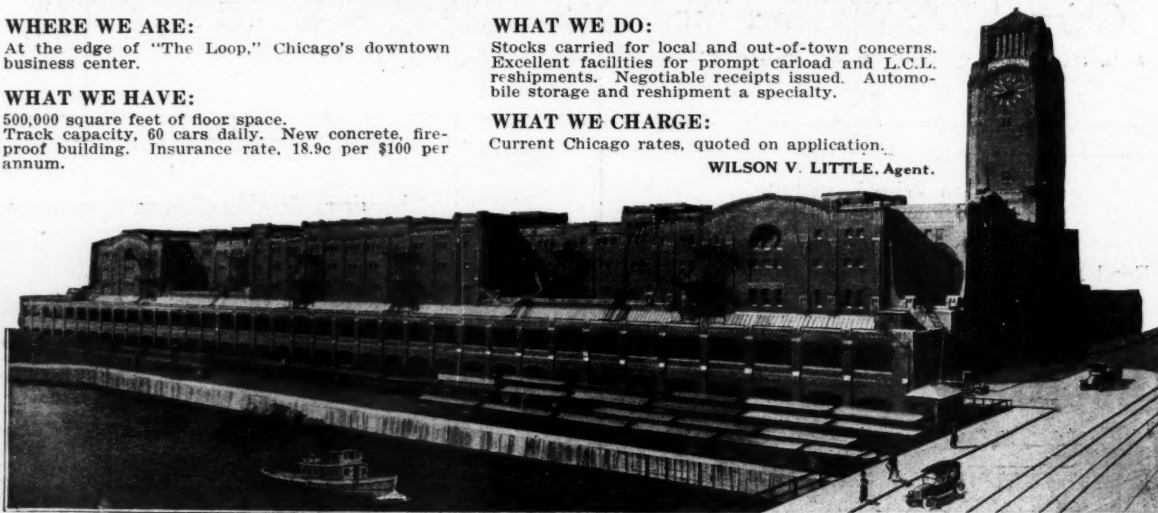
#### WHAT WE DO:

Stocks carried for local and out-of-town concerns. Excellent facilities for prompt carload and L.C.L. reshipments. Negotiable receipts issued. Automobile storage and reshipment a specialty.

#### WHAT WE CHARGE:

Current Chicago rates, quoted on application.

WILSON V. LITTLE, Agent.



## FORT WAYNE, IND.

**BROWN TRUCKING COMPANY**MOVING, DISTRIBUTING, STORAGE AND  
GENERAL TRANSFER—MOTOR SERVICE

Pool Cars a Specialty

Office, 125 W. Columbia Street

## FORT WAYNE, IND.

*Private Siding With All Railroads***Pettit's Storage Warehouse**

FIRE PROOF BUILDING

ROOMS FOR HOUSEHOLD FURNITURE

General Merchandise Warehousing and Transferring  
Factory Distributors

## INDIANAPOLIS IND.

We Have the Very Best of Equipment for Handling  
Heavy Machinery, Boilers, Engines, Tanks  
Vaults and Safes for Erecting Smoke Stacks

INVESTMENT \$200,000.00

We have just completed one of the most modern fire-proof warehouses in the country—centrally located on a privately owned railroad switch accommodating eight cars.

We are equipped to give the very best service in all kinds of moving and packing. All shipments consigned to our care will receive prompt attention and our twenty-five years' experience and reliability insures this service.

**HOGAN TRANSFER & STORAGE CO.**Member  
N. F. W. A. and I. F. W. A.Established  
1892The Men Who Distribute  
**Keystone Wire & Steel  
Products**Read DISTRIBUTION & WAREHOUSING  
and consult the Shippers' IndexThe Men Who Distribute  
**Aunt Jemima Pancake  
Flour**Read DISTRIBUTION & WAREHOUSING  
and consult the Shippers' Index

## INDIANAPOLIS, IND.



## Our Service Consists of

Warehouse for Manufactured Articles.

Prompt shipment for all orders.

Prompt reports of shipments as you want them.

Trucks for Drayage Equipment.

We are, in fact, ready to be your Shipping Department.

Located in the heart of the U. S. A., within 12 to 24 hours of your customers in Indiana, Ohio, Illinois, Kentucky and Michigan.

Insurance rate, 30c—extra hazardous goods not taken.

Six-story and basement, heavy mill construction, sprinkler equipped, A. D. T. Watchman Service. 150,000 square feet heated to 50°.

We solicit your business and refer you to any of our customers as to our ability to do it right.

## Railroads:

Penna. Ry.; C. C. C. & St. L. Ry.; C. I. & W. Ry.; L. E. & W. Ry.; Ills. Central Ry.; C. I. & L. Ry.  
18 Traction Freight Lines.**The Indianapolis Warehouse Co., Inc.**

FRANK A. TODD, V. P. and Gen'l Mgr.

West New York and Canal

INDIANAPOLIS

INDIANA



INDIANAPOLIS, IND.

Warehouse No. 1  
620 S. Capitol Ave.

Warehouse No. 2  
E. New York and  
Big 4 R. R.

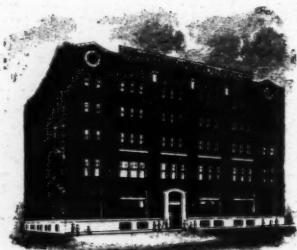
## Tripp Warehouse Company

Merchandise Distribution  
General Storage

INDIANAPOLIS

WICHITA, KANS.

A. F. JONES, President  
A. S. PARKS, Vice-President  
J. H. BRUGH, Sec'y and Gen'l Mgr.



WE OPERATE THREE OF  
THE FINEST FIREPROOF WAREHOUSES  
IN THE MIDDLE WEST



General Warehousing  
Storage, Forwarding and Distributing

ROCK ISLAND AVENUE & 2ND STREET

Loans Made on Warehouse Receipts  
Capital \$100,000.00

LOUISVILLE, KY.

**SAFETY**  
**TRANSFER & STORAGE CO., INC.**  
Offices 105 S. Hancock St.  
**HOUSEHOLD GOODS**  
Moved, Packed, Stored, Forwarded  
**AUTOMOBILE AND TRACTOR STORAGE**  
Members I. F. W. A.

ALEXANDRIA, LA.

## Carnahan's Transfer & Storage

Alexandria,

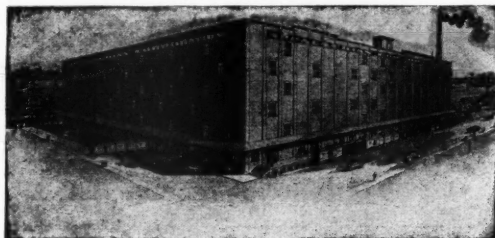
La.

Merchandise and Furni-  
ture Storage Distributors  
and Forwarders.  
*Auto Truck Service*

The Men Who Distribute  
**Durkee's Salad Dressing**  
Read **DISTRIBUTION & WAREHOUSING**  
and consult the Shippers' Index

NEW ORLEANS, LA.

# APPALACHIAN SERVICE



**SPACE—STORAGE—DISTRIBUTION  
and FORWARDING**  
*To the WORLD'S COMMERCE*  
Through the  
**PORT OF NEW ORLEANS, U. S. A.**

**STORAGE** We own the Largest Modern Public and Government Bonded Warehouse in the South. Contains 7,500,000 cubic feet, equal to more than 14 acres of surface storage facilities, caring for 3,000 carloads of material at one time. Our sidings have a capacity of 24 cars. Direct connection with all railroad and steamship lines entering New Orleans.

**DISTRIBUTION** Our facilities for giving our clients a Perfect Distribution Service are unequalled by any warehouse in the Southern States.

**FORWARDING** We maintain a well organized Freight Forwarding Department for both Import and Export business. We secure lowest freight rates, attend to validation of bills of lading, take out consular invoices, render customs service and deliver merchandise in proper time and condition to steamer or railroad.

FOR **SERVICE ADDRESS**

## APPALACHIAN CORPORATION

INC. OF LOUISIANA

LOUIS B. MAGID, President

South Peters, Thalia, South Front and Erato Streets

**NEW ORLEANS, U. S. A.**

*"The City of New Opportunities"*

### SPECIAL

Our Negotiable Receipts are Current in all financial centers. When desired we assist. We also arrange Marine Insurance and Advances on Carload Shipments.

BALTIMORE, MD.

Phone Gilmor 3000.

THOS. H. VICKERT, President.

## BALTIMORE STORAGE & MOVING COMPANY

1710 to 1720 Edmondson Ave.

Members { N. Y. F. W. A.  
Balt. F. W. A.

Fireproof Wh's'e in rear

BALTIMORE, MD.

Leonidas Levering, Pres.

## CENTRAL WAREHOUSE CO.

**STORAGE—TRANSFER—SHIPPING**

517-525 W. Baltimore St.

**"DISTRIBUTING AGENTS"**

Consign Your Pool-Cars Direct to Us. We Handle Everything

**"EXPERT SERVICE"**

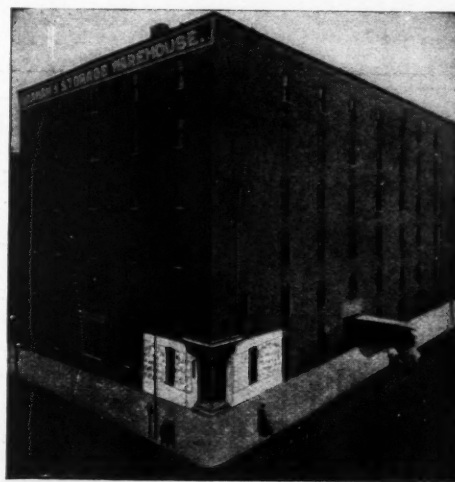
**"LOW FIRE INSURANCE"**

BALTIMORE, MD.

## Graham's Storage Warehouse

*The Largest in Baltimore*

Established 1887 GEO. D. MAGRUDER, Pres. and Gen'l Manager



800 Storage rooms, one to ten Van load capacity.  
Vans load and unload in the centre of the building.

**MOVING — PACKING — SHIPPING**  
**MOTOR EQUIPMENT**

Send us your Baltimore Consignment

Members, N. Y. F. W. A. — I. F. W. A. — Baltimore, F. W. A.

The Men Who Distribute

## Kodaks

Read **DISTRIBUTION & WAREHOUSING**  
and consult the Shippers' Index

BALTIMORE, MD.

### THE KAUFMAN Fire-proof Storage Warehouses



BALTIMORE, MD.

### Send your Baltimore shipments to MONUMENTAL STORAGE COMPANY



BALTIMORE, MD.

### Security Storage & Trust Company

15 W. North Avenue

FIREPROOF WAREHOUSES

MOTOR EQUIPMENT

EFFICIENT SERVICE  
TO WAREHOUSEMEN

Members of  
Baltimore Furniture Warehousemen's Associations  
New York and Illinois Warehousemen's Associations

BOSTON, MASS.

Established 1880

### T. G. BUCKLEY CO.

MOVERS OF HOUSEHOLD GOODS AND PIANOS  
MOTOR TRUCK SERVICE

REINFORCED CONCRETE WAREHOUSE

OFFICE and WAREHOUSE, 690 DUDLEY STREET

Members N. Y. F. W. A.

The Men Who Distribute

### Babbitt's Soap

Read DISTRIBUTION & WAREHOUSING  
and consult the Shippers' Index

## A Well Informed Employee Is Your Greatest Asset

TO GIVE the service that your customers expect and are entitled to receive, it is essential that every department head in your organization have an intimate knowledge of modern warehousing.

This knowledge can best be imparted to the various men in your organization by having them read DISTRIBUTION & WAREHOUSING each month.

On the subscription list of DISTRIBUTION & WAREHOUSING are many prominent terminal, warehouse, manufacturing and transportation companies who receive regularly several copies of each issue for their general executives, traffic managers and other department heads.

The subscription price is only \$2.00 per year (\$2.50 west of the Mississippi). Dictate the letter now, giving us the names and addresses of the men in your company who should be receiving this publication each month.

## DISTRIBUTION & WAREHOUSING

239 West 39th St., New York, N. Y.



BOSTON, MASS.

## Quincy Market Cold Storage and Warehouse Co.

### STORAGE FOR FREE AND BONDED MERCHANDISE

Special Attention  
Given to  
Distribution



Charles River Stores, 480,000 sq. ft. Fireproof construction—Lowest Insurance Rates. Direct track connection with the Boston & Maine R. R. Deep Water Connection—Dock 500 ft. long.

Albany Terminal Stores, 143,000 sq. ft. Fireproof construction—Lowest Insurance Rates. Direct track connection with the Boston & Albany R. R.

Constitution Stores, 60,000 sq. ft. Battery Wharf, 88,000 sq. ft. Wharfage and Storage. Connects with all railroads via Union Freight R. R.

**GEORGE S. LOVEJOY, Manager, General Store Department.**

Main Office: 178 Atlantic Ave., Boston, Mass.

BOSTON, MASS.

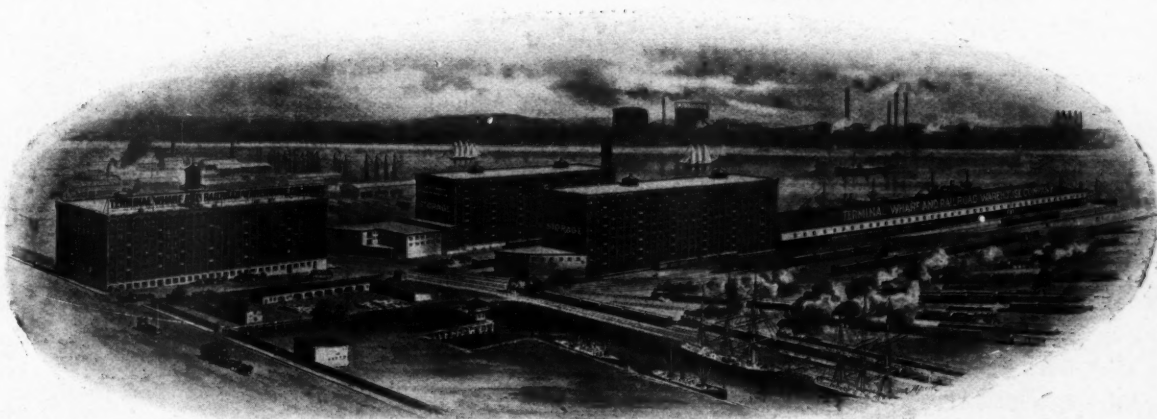
H. H. WIGGIN, PRESIDENT

S. G. SPEAR, TREASURER

## TERMINAL WHARF AND RAILROAD WAREHOUSE COMPANY

50 Terminal Street

Charlestown District, Boston



Storage of Wool, Cotton and  
General Merchandise

LOWEST INSURANCE RATES  
DIRECT TRACK CONNECTIONS  
BOSTON & MAINE R. R.

SHIPPING DIRECTIONS  
MYSTIC WHARF  
BOSTON, MASS.

Fumigation of Foreign Cotton  
and Cotton Waste

AND OTHER MATERIALS AS REQUIRED  
BY U. S. GOVERNMENT

CARTAGE TO AND  
FROM FREIGHT STATIONS  
AND BOAT LINES

WEIGHING, SAMPLING, AND ALL  
SERVICES USUALLY PERFORMED  
BY AN UP-TO-DATE WAREHOUSE

**We will Lease or Build to Suit Tenants**

**HOLYOKE, MASS.**

## Holyoke Warehouse Co.

Park and Crescent Streets

Modern Fireproof  
Warehouse

B. & M. R. R. Siding

We specialize in Merchandise Distribution, Pool Cars or Spot Stocks, Yard Storage, New Autos, Trucks, Farm Implements and Machinery.

**TRY OUR SERVICE**

Heavy Haulage

Truck Service

**NEW BEDFORD, MASS.**

## NEW BEDFORD STORAGE WAREHOUSE CO.

Modern Sprinklered Warehouses, Approximately 400,000 sq. ft. Floor Space.

**Low Insurance Rates**

**Excellent Rail and Water Connections**

N. Y., N. H. & H. R. R. and New Bedford Line, from Pier 40, North River, New York. Daily sailings.

We operate a large, modern pier and storage shed on 25-ft. channel.

**Distribution and Pool Car Shipments Solicited**

**HOLYOKE, MASS.**

### Sheldon Transfer & Storage Co., Inc.

ESTABLISHED 1870

Main Office 647 Main St.

Branch Office 47 Main St.

**SPECIALISTS IN POOL CARS**

Storage Space, 50,000 sq. ft. N. Y. N. H. & H. and B. & M. Sidings

The Men Who Distribute

### Dr. Kilmer's Remedies

Read **DISTRIBUTION & WAREHOUSING** and consult the Shippers' Index

The Men Who Distribute

### Crystal Domino Sugar

Read **DISTRIBUTION & WAREHOUSING** and consult the Shippers' Index

The Men Who Distribute

### Gold Dust

Read **DISTRIBUTION & WAREHOUSING** and consult the Shippers' Index

**BATTLE CREEK, MICH.**

### Household Goods Warehouse

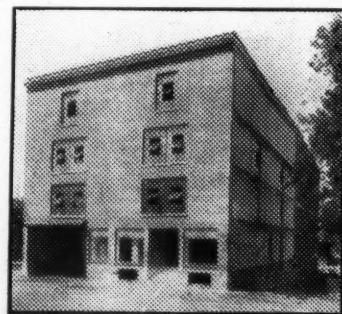
Pool Car Distribution of Merchandise.

Sales Rooms.

**MOTOR TRUCK SERVICE**

Emmerson Truck & Storage Co.

21 Locust St.,  
Battle Creek, Mich.

**BAY CITY, MICH.**

### The Riverside Truck & Storage Co.

**GENERAL MERCHANDISE DISTRIBUTION**

Storage of Household Goods and Merchandise.  
Car Load Lots and less than Car Load Lots.

Private Railroad Track—Sidings on all railroads entering Bay City.

**Office & Warehouses:**

Cor. 2nd & Adams St., Bay City, Mich.

**BAY CITY, MICH.**

G. VAN HAAREN

V. VAN HAAREN

### P. Van Haaren & Sons Storage Co.

**FIRE PROOF STORAGE**

Steel Compartments for Furniture Storage

**GENERAL TRANSFER LINE  
MOTOR TRUCK SERVICE**

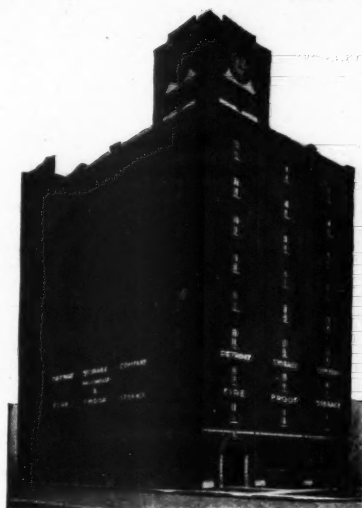
Est. 1880

BAY CITY, MICHIGAN

## DETROIT, MICH.

DETROIT'S LEADING MOVERS.

# Detroit Storage Co.



Main Office and Fireproof Warehouse  
MOVING, PACKING, SHIPPING

MOTOR EQUIPMENT

Corner East Grand Boulevard and Beaubien St.,  
DETROIT, MICH.

## DETROIT, MICH.

## TURNER CARTAGE COMPANY



Phone  
Main  
2660

Shipments of household goods and merchandise will be handled under personal supervision of company officials.

334-340 Lafayette Blvd., DETROIT, MICH.

## FLINT, MICH.

## ALLEN STORAGE CO.

HOUSEHOLD GOODS EXCLUSIVELY

MOTOR TRUCK SERVICE

STORAGE :: PACKING :: SHIPPING

Office: 615 E. Sixth Ave.

Member A. W. A. FLINT, MICH.

## GRAND RAPIDS, MICH.

## Elston Packing & Storage Co.

Storage household goods and merchandise. Seven warehouses with over 200,000 sq. ft. of floor space.

Members of the Illinois Warehousemen's Assn., New York Warehousemen's Assn. and American Warehousemen's Assn.  
GRAND RAPIDS, MICH.

## DETROIT, MICH.

# Roehl Bros

## STORAGE

We have every facility to handle  
your Detroit Shipment.

Address

Office: 526 Alfred St.  
Detroit, Mich.

## GRAND RAPIDS, MICH.

## Kent Storage Company

59 to 69 Front Ave. Grand Rapids, Mich.

Branch at Battle Creek, Mich.

General Merchandise Distribution.

300,000 Sq. Ft. Sprinkler Warehouses.

Free switching on all R.R.'s entering Grand Rapids.

Motor Truck Equipment.

## COLD STORAGE PLANT

(Temp. Zero to 40°)

600,000 Cubic Ft. Cold Storage Space.

Member National League of Commission Merchants.  
Law Tariffs, Schedule of Rates submitted upon application.

## Michigan's Logical Distributing Point

Liberal advances.

Negotiable warehouse receipts issued.

## DETROIT, MICH.

## Shekell Moving Van Company

Fireproof and Non-Fireproof  
Warehouses.

Merchandise Distribution  
and

Household Goods Storage.

24 Motor Trucks in  
Operation.

127-129 Grand River Ave. Detroit, Mich.

## GRAND RAPIDS, MICH.

## Shank Fireproof Storage Company

Largest Fireproof Storage Warehouse in Western Michigan.  
Merchandise and Household Goods.

Members I. F. W. A.

The Men Who Distribute

## Fairy Soap

Read DISTRIBUTION & WAREHOUSING  
and consult the Shippers' Index



## HIGHLAND PARK, MICH.

**MARVIN SPRAGUE**

**STORAGE and CARTAGE  
MOVING, PACKING and SHIPPING  
EXPRESSING**

OFFICE AND WAREHOUSE  
2170 HAMILTON BLVD.  
HIGHLAND PARK, MICHIGAN

## LANSING, MICH.

**Fireproof****Storage & Transfer Company**

Central Michigan Distributing point for pool car shipments. We have the only modern fireproof warehouse in the city for storage of Merchandise, Automobiles, H. H. Goods. Private siding on P. M. R. R. connecting with M. C., N. Y. C. & G. T. Railroads.

**MOTOR TRUCK SERVICE**

## LANSING, MICH.

**Lansing Storage Company**

Exclusive Household Goods Storage  
Moving, Packing, Shipping  
Motor Van Service for Inter-city Work  
"We know how"  
412 No. Washington Ave., Lansing, Mich.

## JACKSON, MICH.

**Jackson Storage & Trucking Co.**

409 to 425 Liberty St., Jackson, Mich.  
Separate Fireproof Locker Rooms. Motor Vans for City and Long Distance Moving. Storage and Packing Household Goods. Warehouse Space and Office Rooms for Rent.  
General Distribution and Storage of Merchandise  
Railroad Sidings on all Roads Entering Jackson

## SAGINAW, MICH.

**CENTRAL WAREHOUSE CO.**

GENERAL WAREHOUSEMEN AND FORWARDERS

**MERCHANDISE DISTRIBUTION****SPRINKLER SYSTEM**

Private Sidings M. C. R. R.

**SAGINAW, MICH.** Office N. Michigan Ave.

## JACKSON, MICH.

**Shaw Storage & Transfer Co.**

107 Michigan Ave., Jackson, Mich.  
H. A. SHAW, Proprietor

Prompt Service—Private Rooms—Popular Rates.

**MOTOR TRUCK SERVICE**

AUTO AND WAGON EXPRESS—PACKING—MOVING—STORAGE

The Men Who Distribute

**Ivory Soap**

Read **DISTRIBUTION & WAREHOUSING**  
and consult the Shippers' Index

## MINNEAPOLIS, MINN.

## OFFICERS:

W. P. TRICKETT, PRESIDENT  
T. J. SKELLET, VICE PRES.  
I. A. THORSON, SECY & TREAS.  
W. J. BUCHANAN, MANAGER

## DIRECTORS:

SEWALL D. ANDREWS  
NORTON M. CROSS  
J. A. GRAHAM  
M. SCHIBBY  
T. J. SKELLET  
I. A. THORSON  
W. P. TRICKETT

# MINNEAPOLIS TERMINAL WAREHOUSE COMPANY



OUR RATES ON FILE WITH STATE OF MINNESOTA BY WHOM WE ARE LICENSED UNDER \$ 50,000 BOND

*Minneapolis,*

October 1, 1920

Mr. Distributor:

Every one of our employees understands that our job as warehousemen is to render the service our customers want and we are doing it. They know that our customer is not satisfied unless his customer in turn is satisfied.

Yours very truly,

MINNEAPOLIS TERMINAL WAREHOUSE COMPANY

*W. J. Buchanan*  
Manager

WJB L

## Sixteen Automobile Trucks

THESE trucks daily cover both Minneapolis and St. Paul, making deliveries for our customers who carry stocks of merchandise with us for the Northwestern trade.

City dealers have your goods delivered at their store door as quickly as from a local factory.

Our service is complete and gives you the advantage of a branch house in the Twin Cities.

**SECURITY  
WAREHOUSE COMPANY**

*Established 1883.*

MINNEAPOLIS, MINNESOTA



**SECURITY WAREHOUSE CO.**  
MINNEAPOLIS, MINN.

## ST. PAUL, MINN.

St. Paul

Minn.



Distributors and Handlers of  
**HOUSEHOLD GOODS**

## ST. PAUL, MINN.

**The Central Warehouse Co.**

Minnesota Transfer, Minn.

**Merchandise, Bonded and Cold Storage  
Industrial Sites**

At the junction of nine railroads, midway between the Twin Cities. L. C. L. shipping without carting. Motor trucks for local deliveries. 40 acres of ground. Six miles of trackage operated by our electric locomotives.

## ST. PAUL, MINN.

**Kedney Warehouse Co.**

Commercial Storage &amp; Forwarding

MINNEAPOLIS ST. PAUL  
8-22 Hennepin Ave. East 3rd & John Sts.  
C. G. W. Trackage

**MR. DISTRIBUTION MANAGER!**

Let us send you a partial list of our customers so that you may "Ask the man who stores with us" if we give real service.

## ST. PAUL, MINN.

**St. Paul  
Terminal Warehouse Co.**

Eighth, Ninth, Locust and Willius Streets  
St. Paul

Fireproof buildings of newest construction, equipped and organized to give warehouse service. Served by all railroads entering the Twin Cities. Merchandise exclusively.

**DISTRIBUTION—STORAGE—  
SPACE RENTALS**

Automatic insurance placed on receipt of your goods, if desired.

## KANSAS CITY, MO.

**Merchandise Warehousing and Distributing**  
BRANCH HOUSES FOR FACTORIES SPACE MERCHANTS  
Pool Car Distribution

**CENTRAL STORAGE CO.**

MAIN OFFICE: 1422 ST. LOUIS AVENUE  
Formerly—Clagett Storage & Transfer Co., Est. 1902;  
Newby Transfer & Storage Co., Est. 1880.

## KANSAS CITY, MO.

**WE** will not call your attention to our modern, wonderfully equipped, fireproof warehouse building, with a 16c. insurance rate and located in the very heart of the implement and freight depot districts, but wish to concentrate your attention upon the consistent, efficient organization we have in our warehouse building. We are in a position to render you service that cannot be equaled in Kansas City, and our rates, we guarantee, will leave you with a profit.

**L. T. CRUTCHER WAREHOUSE CO.**

Distribution and Warehousing

1411 St. Louis Ave.

Kansas City, Mo.

## KANSAS CITY, MO.

**Fireproof Warehouse  
Convenient to All  
Freight Depots**

Send your consignments in our care  
Members of I. F. W. A.

**L. Leritz & Son**

2616-18-20 Warwick

Ins. Rate 22c



## KANSAS CITY, MO.

HOMER L. FARR, Mgr.

**The Liberty Warehouse**

1225-7 UNION AVENUE

Located in the heart of the wholesale district, with side tracks on Union Pacific. Specialists in the handling of distribution accounts. Motor Service.

The Men Who Distribute

**Epsom Salts**

Read **DISTRIBUTION & WAREHOUSING**  
and consult the Shippers' Index



## KEEP IT UP!

One step won't take you very far, you've got to keep on walking;

One word won't tell them what you are, you've got to keep on talking;

One inch won't make you tall, you've got to keep on growing;

One little "ad" won't do it all, you've got to keep 'em going.

*Sent to DISTRIBUTION & WAREHOUSING  
by George S. Lovejoy, Vice-President of the  
American Warehousemen's Association.*

### KANSAS CITY, MO.

## Are You Giving Your Customers Service?

The present congested conditions of our railroads and slow movement of less than carload freight, and the possibility of embargoes on many commodities, make it more imperative than ever that you carry suitable stocks of your goods at important Western distributing centers to properly take care of your trade in that territory.

We invite you to make use of our warehouse as a branch of your own establishment for this purpose. Our building is of modern fireproof construction and equipment—automatic sprinkler system—low insurance rates—free switching of carloads. Ample teaming equipment and twenty years of knowing how, insures prompt, efficient and satisfactory service.

**D. A. MORR**  
**TRANSFER & STORAGE COMPANY**

Members { Central Warehousemen's Club  
American Chain of Warehouses  
American Warehousemen's Association  
Illinois Furniture Warehousemen's Association  
New York Furniture Warehousemen's Association

*Please mention this paper*

### KANSAS CITY, MO.

## SOUTHWEST WAREHOUSE CORP.

KANSAS CITY, MO.  
19th and Campbell Sts.

Motor Service  
for City  
Shipments



Low  
Insurance  
Rates

Modern Fireproof Warehouse, Nine Floors, 500,000 Square Feet

LOCATION  
ON KANSAS CITY TERMINAL RAILWAY CO.  
L. C. L. SHIPPING WITHOUT DRAYAGE.

STORAGE

DISTRIBUTION

SPACE

ST. LOUIS MO.

**A Terminal-Transfer Company with an Ability to Serve**

**ST. LOUIS**  
Most Central  
Distribution  
Point in  
United States

Nine Freight Depots; One Mile of Platforms  
More than 250,000 Square Feet of Storage  
and Warehouse Space

225 Teams and 75 Motor Trucks

We are especially well equipped for the prompt handling of consolidated cars for distribution both locally and for points beyond. When consigned care Columbia Terminals Company (La Salle Street Station) you get the benefit of Daily Package Car Service from St. Louis to the West, Southwest and Southeast.

**Leased Motor Truck Service** - By Hour, Day or Contract -

**COLUMBIA  
TERMINALS CO.**

**America's Largest  
Terminal-Transfer  
Organization**

\$2,000,000 Capital

ST. LOUIS, MO.

**LANGAN & TAYLOR**

**Storage and Moving Co.**

R. Lee Orcutt, Pres.



**Largest Furniture  
Warehouse in  
St. Louis**  
Capacity 1,500,000 cu. ft.  
Absolutely Fireproof

**Largest Fleet of  
Auto Moving Vans in  
St. Louis**  
15 Enclosed Trucks  
Latest Design

Warehouse and Office  
**Delmar Blvd. at Euclid Ave.**

## BILLINGS, MONTANA

**Billings Warehouse & Trading Co.**

(Incorporated)

204-216 North 21st Street

Branch House Service for  
National Distributors

Investigate the immense and rapidly developing territory for which Billings is the best distribution center.

## MISSOULA, MONT.

**Security Warehouse & Transfer Co.**

(Incorporated)

Warehousing of every description: Storing, Packing, Carting, Shipping. R.R. Siding. Manufacturers' distributors. We solicit your Western Montana shipments.

## OMAHA, NEBR.

**Gordon Fireproof Warehouse & Van Co.**

Main Office: 219 NORTH 11th STREET

Six warehouses covering over one city block. 200,000 square feet of floor space. Four warehouses equipped with automatic sprinkler systems.

Warehouses served by private tracks on the C. B. &amp; Q. and the C. &amp; N. W. (joint track); and the Illinois Central. All roads absorb switching charges.

Accommodations for brokers, jobbers, automobile manufacturers and dealers.

Household Goods Packed, Stored and Forwarded

**MOVING — TRANSFER — FORWARDING**MEMBER { New York Furniture Warehousemen's Association.  
Illinois Furniture Warehousemen's Association.  
Central Warehousemen's Club.  
Pacific Coast Furniture Warehousemen's Association.**THE PURCHASING POWER**

of the field covered by

**Distribution and Warehousing**is that of an industry with a total investment of more than  
\$1,000,000,000.00

## OMAHA, NEBR.

**NEW FIRE PROOF BUILDING**

1,500,000 Cubic Feet Storage and Leasing Space, Sample Rooms, Office Space, Merchandise, Storage and Distribution Exclusively.

**Mercantile Storage & Warehouse Company**

Omaha, Nebraska.

*We Specialize in Merchandise Distribution*

## OMAHA, NEBR.

**THE  
"CITY OF OPPORTUNITY"**

Represented by the

**Pacific Storage & Warehouse Co.**

1007-9-11 JONES STREET

We have studied the problems of the national distributor of manufactured articles and merchandise and have both the experience and facilities to care for business of this kind in a way that will satisfy the most critical.

Write us about the goods you have to be distributed in this territory and we shall be glad to quote prices for delivery, storage or reshipping.

**MOTOR TRUCK SERVICE — 75,000  
SQUARE FEET OF STORAGE SPACE**

Members of the Central Warehousemen's Club



**ATLANTIC CITY, N. J.****ELDREDGE EXPRESS and STORAGE WAREHOUSE CO.**

Office: 110 N. South Cardina Avenue  
Inter-City Auto Service Heavy Hauling



Railroad  
Siding and  
Storage Yard

Storage for  
Goods and  
Merchandise

Piano Moving

Phone 108

**EAST ORANGE, N. J.**

Established 1887

R. T. BLAUVELT, Pres.

**LINCOLN STORAGE WAREHOUSES**

FIREPROOF NON-FIREPROOF MOTOR EQUIPMENT

Members of New Jersey—New York—Illinois—Southern  
Warehousemen's Associations

Principal Office, 85 MAIN STREET

**NEWARK, N. J.**

Estab. 1850

Jos. V. Lupo, Pres. & Treas.  
John F. Lupo, Sec.

**JOB De CAMP, INC.**

80 PARK PLACE

Transfer of Household Goods  
Freight, Heavy Haulage,  
Motor Service

Storage of Household Goods  
Mdse., New Autos, Imple-  
ments, Yard Storage.

Factory Distributors

N. J. W. A. Member of A. W. A. and N. Y. F. W. A.

**NEWARK, N. J.****LYON STORAGE CO.**

97 Canal Street, Newark, N. J.

Finest cold storage equipment and ample space in  
reserve at all times for use of our clients.

Facilities for handling general merchandise are unex-  
celled in our territory.

We make a specialty of pool car distributing and re-  
forwarding.

We will forward, store or distribute your merchandise,  
anywhere. Greater New York or metropolitan Jersey  
district distribution done quickly and economically.  
Forwarding shipments for European, Latin-American  
and other foreign ports through the Port of Newark  
is service we have developed particularly well for con-  
venience of our clients.

Feel free at any time to ask any special service. Your  
patronage or inquiry is solicited for any warehousing  
or distribution service. Details on request.

**Lyon Storage Company**

**NEWARK, N. J.**

ESTABLISHED 1860

SHIP TO NEWARK'S LEADING  
FURNITURE and MERCHANDISE WAREHOUSE

**KNICKERBOCKER STORAGE WAREHOUSE COMPANY**

JOHN MULLIGAN  
PRES.

JAMES E. MULLIGAN  
SEC. & GEN. MGR.

MOVING, PACKING, DISTRIBUTING,  
SHIPPING, MOTOR EQUIPMENT

MEMBERS N. Y. W. A. and N. Y. F. W. A.

**NEWARK, N. J.**

We operate three fireproof warehouses for the storage and dis-  
tribution of merchandise.

Warehouses located near all Rail and Water Terminals.

Motor delivery service throughout New Jersey and New York.  
For further information address

**MOONEY'S STORAGE WAREHOUSES**

Offices  
35-37 VAN BUREN STREET, NEWARK, N. J.  
Phones: 4370-1 Mulberry Est. 1882

**TRENTON, N. J.**

"Expert Service"

**Arcade Express & Storage Co.**

Harry A. Douglass, Prop.

Merchandise and Furniture Storage Warehouse

Distributors and Forwarders  
In Main Business Section of City

Motor Van Service

13-17 East State Street, Trenton, N. J.

Bill via any R. R.

**TRENTON, N. J.****Petry Express & Storage Co.**

(INCORPORATED)

STORAGE WAREHOUSES

MERCHANDISE and HOUSEHOLD GOODS

MOVERS—PACKERS—SHIPPERS

MOTOR VAN SERVICE

Carloads Distributed. Manufacturers Distributors.  
Members N. Y. F. W. A. and I. F. W. A.

The Men Who Distribute

**Mellin's Food**

Read DISTRIBUTION & WAREHOUSING  
and consult the Shippers' Index

## ALBANY, N. Y.

**SECURITY****STORAGE & WAREHOUSE CO., INC.**

Jas. G. Perkins, Custom House Broker

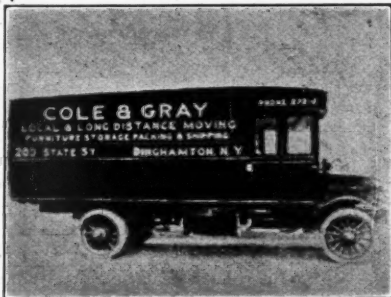
1 DEAN STREET

Storage, Transferring and Forwarding

Direct Track Facilities

Pool Car Distribution

## BINGHAMTON, N. Y.

THREE  
WAREHOUSES  
33 Years in BusinessMerchandise  
Distribution  
and Pool Car  
Shipments Given  
Special  
AttentionStorage of House-  
hold Goods,  
Merchandise,  
Implements and  
Machinery.  
Auto Trucks  
Heavy Haulage**COLE & GRAY**

203 State Street

Binghamton, N. Y.

## BINGHAMTON, N. Y.

**MOLLEN TRANSFER & STORAGE CO.**

—P. O. Box 872—

TWO WAREHOUSES

SIDING ON ERIE

WE SPECIALIZE IN

Merchandise Distribution—Pool Cars—also all classes Transfer Work.

Members: Chamber of Commerce—Illinois and New York  
Furniture Warehousemen's Association.  
American Warehousemen's Association.

## BINGHAMTON, N. Y.

Member Chamber of Commerce

**JOHN B. SOUTHEE**

STORAGE WAREHOUSE AND VAN OFFICE

MOVING AND TRUCKING OF ALL KINDS

178 STATE STREET

Office Phone 1366  
House Phone 1799Residence,  
60 Moeller St.

## BRONXVILLE, N. Y.

**Gramatan Warehouse**

New, Modern and Up-to-Date Furniture Warehouse

ABSOLUTELY FIREPROOF

When sending shipments to Bronxville, ship to the  
**GRAMATAN WAREHOUSE****Packing—Moving—Storage**

R. R. Siding on N. Y. Central Railroad.

F. B. VALENTINE  
ManagerTELEPHONES:  
DAY—Bronxville 1456  
NIGHT—Mt. Vernon 328-M  
V.O.A.

N.Y.F.W.A.

## BROOKLYN, N. Y.

Cable Address, *Jenkinis*  
Western UnionLong Distance Phones  
3100-3101-3102 Bedford

ABSOLUTELY FIREPROOF

**Long Island Storage Warehouses**

Nostrand and Gates Avenues

BRANCH WAREHOUSES

881-891 Park Avenue

781-789 Kent Avenue

To save delay in consignments for delivery to any part of  
New York City or Brooklyn, mark goods in our care to "Eastern  
District Terminal, Brooklyn." This is the center of Greater  
New York—no delay due to congestion.**Try shipping this way. We know**

## BROOKLYN, N. Y.

Established 1889

**Chas. D. Strang's  
Montauk Storage Company**

195 So. PORTLAND AVE.

Send your shipments to Brooklyn in my care.  
Both your customers and yourself will receive  
prompt, careful and courteous attention.Storage, Moving, Packing and  
Shipping of Household Goods.

N. Y. F. W. A.

I. F. W. A.

S. F. W. A.

## BUFFALO, N. Y.

**BUFFALO****STORAGE & CARTING COMPANY**STORAGE, TRANSFER AND  
FORWARDING

Warehouse on New York Central Tracks

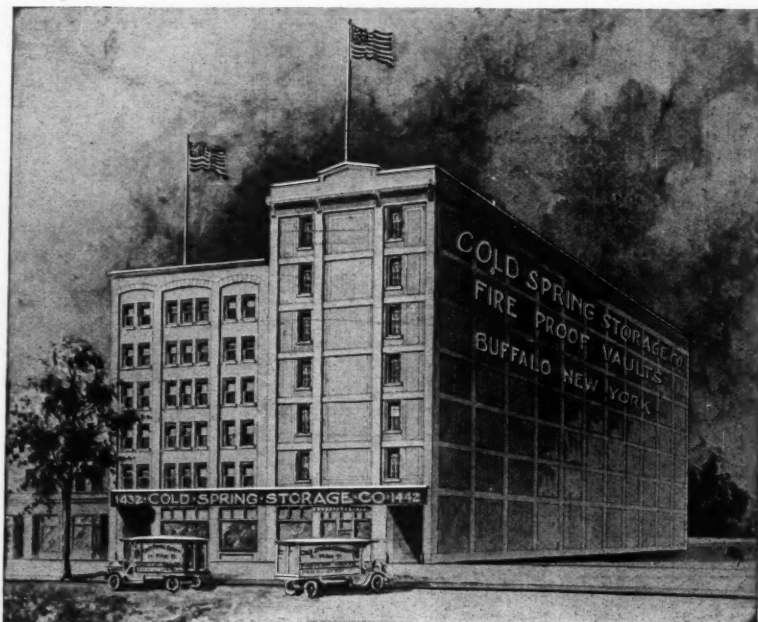
**If Your City Isn't  
Represented Here**Put it on the shippers' map by  
inserting your card in this space.

The Men Who Distribute

**Bixby's Blacking**Read DISTRIBUTION & WAREHOUSING  
and consult the Shippers' Index

BUFFALO, N. Y.

WE WILL LOOK AFTER YOUR INTEREST AT BUFFALO



EXPERTS in storage, moving, packing and shipping household goods of every description.

Members of Buffalo Chamber of Commerce, Illinois Furniture Warehousemen's Ass'n, New York Furniture Warehousemen's Ass'n.

## Cold Spring Storage Company

J. W. POWELL & SON, Props. & Mangrs.

After

25 Years' Efficient Service

We have just completed a

### SEVEN STORY

"UP TO DATE"

## FIRE PROOF WAREHOUSE

The best in existence to-day; the last say in storage warehousing up-to-the-minute.

NOW

With our trained corps of experienced and expert workmen, our five warehouses, our large fleet of auto moving van trucks, and unequalled facilities

WE ARE AT YOUR SERVICE

and solicit your Buffalo shipments.

BUFFALO, N. Y.

### O. J. GLENN & SON

Everything in the Line of Moving, Carting, Packing, Storage

OFFICE: 204 TERRACE STREET

BUFFALO, N. Y.

### Monarch Storage & Warehouse Co., Inc. "SERVICE"

In distribution of goods for National Merchandisers.  
286-308 Elm St., Buffalo, N. Y.

ELMIRA, N. Y.

### WE SHIP SUDDEN

Located Main Line—D. L. & W. R. R. and Erie, Pa., L. V. railroads.

DISTRIBUTING AND WAREHOUSING

Best Warehouse in the Southern Tier.

Low insurance.

Reference: Second National Bank,  
Chemung Canal Trust Co.  
and many mercantile houses.

### JOSEPH BIMBERG SONS

Elmira, N. Y.

ELMIRA, N. Y.

### Elmira

### Storage & Sales Co., Inc.

BEST DISTRIBUTING POINT in Western New York and Pennsylvania.

Warehouse, 50,000 square feet floor space, can accommodate 100 cars of merchandise.

Free switching privileges D., L. & W., Erie, Penna. and L. V. railroads. Switch enters building; can load and unload under cover.

General Merchandise and Storage. Forwarding and Transferring a specialty.

Competent help in office and warehouse. We can be used as a branch house at no extra expense.

We do our own trucking.

FLUSHING, N. Y.

### Blackham Storage & Trucking Co. INC.

We do a general storage, moving, carting and packing business covering Flushing and Long Island. Try our service, you'll like it.

OFFICE: 72-74 GROVE ST., FLUSHING, NEW YORK

GLENS FALLS, N. Y.

### H. A. STEVENS & SON

Furniture and Merchandise Storage. Local and Long Distance Moving, Packing, Crating.



NEW YORK, N. Y.

# CAMPBELL STORES

WAREHOUSEMEN  
& TRUCKMEN

## Hoboken, New Jersey

Just Across the River From New York City

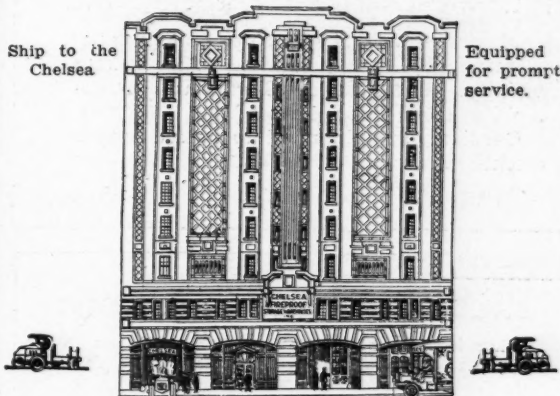
TELEPHONE HOBOKEN 1576

NEW YORK, N. Y.

### Chelsea Fireproof Storage Warehouses, Inc.

COMPLETE SERVICE TO SHIPPERS

Storage, Moving, Packing, Shipping, Express  
and General Trucking



Our Harlem Warehouse

### Chelsea Fireproof Storage Warehouses, Inc.

LOUIS SCHRAMM, Pres. WM. F. HAHN, Secy and Treas.

Main Office  
426-434 West 26th St.

Harlem Branch  
112-120 West 107th St.

Members of

New York Furniture Warehousemen's Association  
Illinois Furniture Warehousemen's Association  
The Merchants' Association of New York

NEW YORK, N. Y.

## Important Announcement

### Warehouse Receipt and Fire Insurance Policy —both in one document

**A**NOTHER INNOVATION in storage warehousing—*Insured Warehouse Receipts!*

Perfecting the feature of Automatic Commodity Insurance which it originated last year, Independent Warehouses, Inc., has just put into operation a plan under which the warehouse receipt issued to the customer is, at one and the same time, the fire insurance policy.

The *Insured Warehouse Receipt* contains a clause, *printed on the face of the receipt*, certifying that the commodities are insured for a specific sum, based on the value declared by the customer.

MEMORANDUM FOR BANKERS—*This plan obviates the usual trouble and risk involved in obtaining, scrutinizing and caring for separate insurance policies as necessary documents incident to loans made against warehouse receipts.*

The cost of the insurance under this *new* plan is no more than the cost of separate policies under the *old* method.

The insurance is automatic—it takes effect *immediately* upon the arrival of the commodities at the warehouse platforms, bulkheads, or in the streets adjacent thereto.

Another vital feature: the insurance passes current to the holder of the receipt for value *immediately* upon its negotiation, as his interest may appear.

Full details on request.

## INDEPENDENT WAREHOUSES, Inc.

415-427 GREENWICH STREET

NEW YORK

Inaugurated by GUARANTY TRUST COMPANY OF NEW YORK  
and LIBERTY NATIONAL BANK OF NEW YORK

## NEW YORK, N. Y.

"Every Room is an Actual Vault"

### Atlas Fireproof Storage Warehouse Co.

157 159 West 124th Street (near Seventh Ave.)

Moving—Packing—Storing—Shipping  
A terminal of every railroad in immediate vicinity. Bill "Harlem Terminal." Automobiles taken in dead storage.

Consign your shipment to us for proper attention.

NYFWA

VOA

## NEW YORK, N. Y.

### Julius Kindermann & Sons

Three large fireproof storage warehouses adjacent to Washington Heights and all counties in Westchester section

1360-62 Webster Avenue, near 170th Street, Bronx

## NEW YORK, N. Y.



### MORGAN & BROTHER

Storage Warehouses  
and Motor Vans

MOVING STORAGE PACKING

Our reputation in handling collections on consignments is your guarantee in selecting us as your correspondent in New York City

*Furniture and Works of Art Boxed  
and Shipped to all Parts of the World*

230-232-234-236 WEST 47th STREET  
TELEPHONE 52 BRYANT Near Broadway

Cable Address: MORGANWARE

Members:

New York Furniture Warehousemen's Association  
Illinois Furniture Warehousemen's Association  
Van Owner's Association of Greater New York

## NEW YORK, N. Y.

### Mott Haven Storage Warehouse Co.

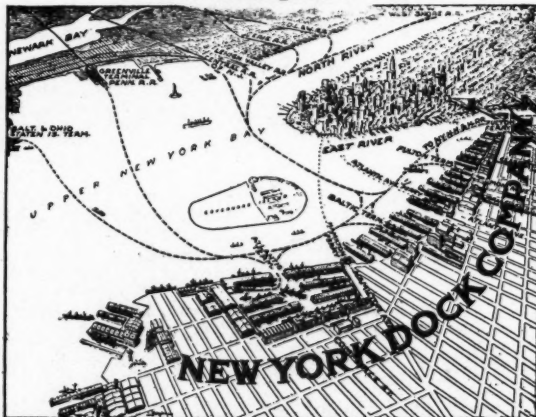
Fireproof and Non-fireproof Warehouses  
Factory Distributors — Motor Service

Adjacent to all Bronx Terminals. Economic and Satisfactory Service

THIRD AVENUE AND 140th STREET

## NEW YORK, N. Y.

### Largest Bonded and Free Warehouse and Pier System in the Western Hemisphere



Occupying approximately 2½ miles of the Brooklyn waterfront.

159 BONDED AND FREE WAREHOUSES having a storage capacity of 65,435,000 cubic feet or 116.2 acres of floor space.

34 PIERS

20 MANUFACTURING BUILDINGS  
3 RAILROAD TERMINALS

*Buildings for lease with lightering and railroad facilities*

### NEW YORK DOCK COMPANY

44 Whitehall Street, New York  
Calendar showing map of New York Harbor sent on request

## NEW YORK, N. Y.

Phone Spring 8732-8733

### North River Warehouses, Inc.

606-608-610 Washington Street, New York City

Merchandise Storage and Distribution  
Centrally Located To All RR Terminals

## NEW YORK, N. Y.

### A Room for Every Load of Furniture The Tiffany Fireproof Storage Warehouses

1133-35 Tiffany Street, Bronx

When consigning your goods to the Bronx, ship to us. We are conveniently located near all railroad terminals.

Efficient service, our motto.

Packing — Shipping — Crating.

Members of

N. Y. F. W. A., V. O. A. of Greater New York.

### If Your City Isn't Represented Here

Put it on the shippers' map by inserting your card in this space.

## NEW YORK, N. Y.

**Vandam Warehouse Co., Inc.**

General Offices—No. 29 Broadway  
NEW YORK CITY

Phone Whitehall-353.

8 CITY WAREHOUSES

also

Waterfront Pier and Warehouses:  
MARINERS HARBOR, STATEN ISLAND

## NEW YORK, N. Y.

**Ship Thru the Port of New York**

To avoid loss of business  
thru transportation delays.

Prompt handling of your consign-  
ment in any quantity, large or  
small, will be our specialty. Your  
distribution and freight forward-  
ing will be trucked with teams or  
motors as economy in the cost  
of carting dictates.

Modern fireproof storage build-  
ing—located convenient to all  
freight terminals, also within two  
blocks of the New York State  
Barge Canal Terminal.

We furnish a complete service.  
Let us quote on your require-  
ments.

**Willoufred**  
**WAREHOUSES**  
Inc.

**General Merchandise Storage**

665-73 11th Ave., and 601-03 W. 48th St.  
New York City

## NIAGARA FALLS, N. Y.

**WILLIAM YOUNG**

TRANSFER AND STORAGE OF  
HOUSEHOLD GOODS

MACHINERY AND SAFE MOVING A SPECIALTY  
"Unexcelled SERVICE"

## ROCHESTER, N. Y.

Arthur S. Blanchard, President and Treasurer

**Blanchard Storage Co., Inc.**

Storage  
Moving

HOUSEHOLD GOODS

Packing  
Shipping

Rochester "Chief" Rug and Carpet Cleaners

Allen and N. Washington Streets

Members New York and Illinois Furniture Warehousemen's Association

## ROCHESTER, N. Y.

Storage, transfer and forwarding of general merchandise. Only ware-  
house situated in center of city on N. Y. C. R. R. siding. Equipped  
with sprinkler system. Lowest insurance rates.

**MONRCE WAREHOUSE CO., INC.,**

55-83 Railroad Street

Rochester, N. Y.

## ROCHESTER, N. Y.

**ROCHESTER CARTING CO.**

Members New York Warehousemen's Association  
Distributors of Car Load Freight

Unsurpassed facilities for Storing, Transferring and Forwarding  
Merchandise and Household Goods  
Two Large Storage Warehouses

162-164 ANDREWS STREET

## ROCHESTER, N. Y.

**JOSEPH A. SCHANTZ  
COMPANY**

173-219 CENTRAL AVENUE



We have every facility for handling your Rochester shipments

**Two Fireproof Warehouses**  
**Two Non-fireproof Warehouses**  
**Large Fleet of Modern Motor Vans**

By mailing your Rochester bills of lading to us you are  
guaranteeing the most prompt and courteous service to  
your patrons. You are also protecting your own in-  
terests, because we will return all collections promptly  
and watch the details carefully.

Member of New York Furniture Warehousemen's Ass'n.

## SCHENECTADY, N. Y.

**SCHENECTADY**

is a natural Distributing Center. We make a  
specialty of L. C. L. Forwarding and Distribu-  
tion of Pool Cars.

Two up-to-date Warehouses. Track con-  
nections with all Railroads entering City.

Storage of Household Goods, Merchandise,  
Implements, Yard Storage. Heavy Haulage.  
Motor Service.

**SCHENECTADY STORAGE &  
TRUCKING COMPANY**



## SYRACUSE, N. Y.

**Flagg Storage Warehouse****TWO FIREPROOF WAREHOUSES**

STORAGE OF GENERAL MERCHANDISE  
and HOUSEHOLD GOODS

We are in position to render quick and efficient  
service.

Centrally located to all jobbers and freight  
houses.

Correspondence Solicited.

100 Townsend St.,

Syracuse, N. Y.

## SYRACUSE, N. Y.

**Great Northern  
Warehouses, Inc.**


Located in the heart of Syracuse,  
a logical distributing center for  
serving two million people with-  
in a radius of 80 miles.

Modern reinforced concrete build-  
ing, seven stories and basement,  
equipped with sprinkler system  
and A.D.T. watchman service.  
120,000 square feet of floor space  
heated to 50°.

Lowest Rate of Insurance

Modern Handling Equipment

Excellent Shipping Facilities on  
Private Siding.

**350-360 W. FAYETTE ST.**

SYRACUSE, N. Y.

## SYRACUSE, N. Y.

**King Storage Warehouse, Inc.**

Opposite N. Y. C. West St. Station


**COMMERICAL and FURNITURE  
STORAGE  
PRIVATE RAILROAD SIDINGS**
**DISTRIBUTING SERVICE**

Carload or less carload shipments will receive prompt and care-  
ful attention. This branch of warehousing has been a specialty  
with us for over twenty years. We maintain our own delivery  
service.

**HOUSEHOLD GOODS**

We solicit your Syracuse business. Motor delivery service.  
Careful attention to collections. Satisfaction to yourself and  
customer guaranteed.

**FOR SAFETY WE SHIP FURNITURE IN THE KING SHIPPING  
CASE**

## UTICA, N. Y.

**Consign Utica Shipments**

to

**JONES-CLARK TRUCKING AND  
STORAGE CO., Inc.**

127-135 Hotel St.

**SPECIAL ATTENTION** given to Mer-  
chandise Distribution and Pool Car Ship-  
ments. Storage of Merchandise, Furniture,  
New Autos and Machinery.

MEMBERS NEW YORK AND ILLINOIS ASSOCIATIONS

U. S. C. Bonded

Bill Via N. Y. C., D. L. & W., N. Y. O. & W.

## UTICA, N. Y.

**UTICA****CARTING & STORAGE COMPANY**

Storage, Trucking, Forwarding,  
Shipping, Rigging, Transferring,  
Distributing, Checking, Packing

**MOTOR VANS FOR LONG DISTANCE**

Members New York and Illinois Associations.

# Pick Your Consignee

from the companies listed in  
this section—they are the "live  
wires" of the field and will han-  
dle your shipments promptly  
and efficiently.

**RALEIGH, NORTH CAROLINA****Carolina Storage & Distributing Co.**

Raleigh (Bonded) North Carolina  
We store, reship and distribute all classes of freight. Modern brick warehouses located on railroad tracks. Pool car distribution a specialty. Being centrally located, reaching a population of over 1,500,000 within a radius of 100 miles, and having excellent railway service. Raleigh is most logical distributing point for this territory.

**MINOT, N. D.**

CONSIGN YOUR SHIPMENTS TO  
**THE MINOT WAREHOUSE & STORAGE**  
FACTORY DISTRIBUTORS

Household Goods and Merchandise Stored. Reinforced concrete building with brick walls and hollow tile inner walls.

PRIVATE TRUCKAGE MOTOR EQUIPMENT

**AKRON, OHIO****Akron Warehouse Company**

211-215 S. Broadway

**AKRON, OHIO**

Two Large Warehouses

Railroad siding at each warehouse

Household Goods and Merchandise

Motor Truck Equipment

W. W. Sharp, President

P. S. Shaffer, Manager

**AKRON, OHIO**

**The Union**  
**Fireproof Warehouse Co.**  
OPERATING

The Union Fireproof Furniture  
Warehouses  
and

The Union Terminal Warehouses.  
Merchandise Storage and Pool Car  
Distribution.  
Penna. Siding.

**CANTON, OHIO****The Canton Storage Co.**

318 Cherry Ave., N. E.

**CANTON, OHIO**

"WE DELIVER EVERYTHING."

TWO LARGE WAREHOUSES  
ABSOLUTELY FIREPROOF.

MERCHANDISE & HOUSEHOLD  
GOODS STORAGE.

Car load lots and less than car load lots received, checked, distributed and forwarded.

Served by all Railroads Entering Canton

**CANTON, OHIO****The Cummings Storage Co.**

Cor. 4th and Walnut St., S. E.  
**CANTON, OHIO**

General Merchandise, Distribution and  
Household Goods Storage.

Fireproof and Non-Fireproof Build-  
ings. Private Steel Lockers.

Unsurpassed facilities for handling pool car and  
car load shipments.

Railroad Sidings

Logical Distributor for this Section

**CINCINNATI, O.****STORAGE**

Fireproof and Non-Fireproof

Business Established in 1867 and built up by

**A SERVICE THAT SATISFIES**

Prompt Deliveries by Motor  
Complete Transfer Facilities

Member  
of  
New York Furniture  
Warehousemen's  
Association  
and  
Illinois Furniture  
Warehousemen's  
Association

**FRED  
PAGELS**

937 West 8th St.

**CINCINNATI, OHIO**

Established 1858

We are equipped to handle carloads and less than carloads for out of town firms. Warehouse on Pennsylvania Railroad. Motor Truck and Team Service.

**WALLACE TRANSFER & FORWARDING CO.**  
222 and 224 East Front Street

**If Your City Isn't  
Represented Here**

Put it on the shippers' map by  
inserting your card in this space.

CINCINNATI, OHIO

**"STACEY FIRST"**

**SERVICE**  
FIREPROOF AND NON-FIRE-  
PROOF WAREHOUSES

MODERN MOTOR  
VAN EQUIPMENT

**RELIABILITY**

Established 1891 Investment \$250,000  
Your interests carefully protected

**STACEY STORAGE CO.**

2333 Gilbert Avenue

CLEVELAND, OHIO

## **'THE CLEVELAND STORAGE CO.**

Established 1883

Offices: Guardian Building

**Mercantile Storage Only**

Pool Cars for Distribution  
and Reshipment

Convenient to Business and Shipping District

**LOW INSURANCE RATES**  
Sprinkler System

3 Warehouses, Private Siding,  
C. C. C. & St. L. R. R.

Under Railroad Rules in effect October, 1918,  
all roads absorb carload switching charges.

CLEVELAND, OHIO

## **THE CENTRAL STORAGE WAREHOUSE CO.,**

1843 East 55th Street

CLEVELAND, OHIO

5601 Hough Ave.

MERCHANDISE DISTRIBUTION—HOUSEHOLD GOODS STORAGE



One of the World's Largest Moving Vans

**SERVICE IS THE THING FOR YOU AND YOUR CLEVELAND CUSTOMERS  
LET US SERVE THEM AS THEY SHOULD BE SERVED**

OUR EQUIPMENT—FIREPROOF AND NON-FIREPROOF STORAGE OPERATING 40 MOTOR TRUCKS.  
OUR ORGANIZATION IS COMPLETE AND IS MORE THAN AMPLE FOR THE LARGEST AND MOST DIFFICULT PROPOSITION.

—WE CONSERVE YOUR INTERESTS—



CLEVELAND, OHIO  
LAKEWOOD, OHIO

We Solicit Your  
**Cleveland-Lakewood  
SHIPMENTS**

Our new modern fireproof warehouse  
just completed.

**Household Goods Only**

Motor Equipment.

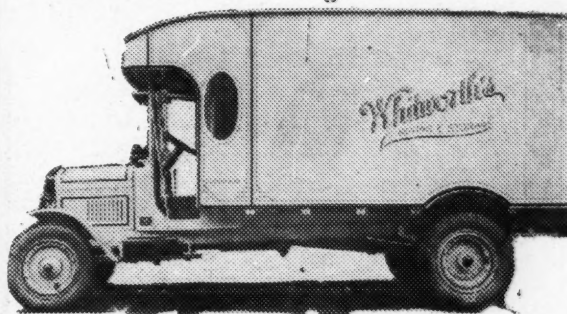
**The Lakewood  
Fireproof Storage Co.**

14401 Detroit Ave.

Cleveland-Lakewood, Ohio

Member: National Furniture Warehousemen's Ass'n

CLEVELAND, OHIO



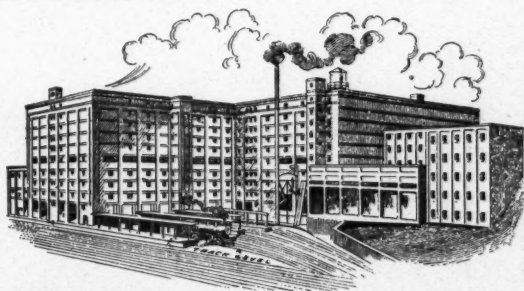
**WHITWORTH'S  
Moving & Storage Company**

1313 East 105th Street  
Cleveland, Ohio.

'Phone, Cedar 1123

*We give special attention to car loading and  
freight forwarding*

CLEVELAND, OHIO



3,000,000 cubic feet General Storage and  
Leasing Space.

1,250,000 cubic feet Cold Storage Space.

62 Car Capacity at one time.

*New, Fire Proof Building*

**SERVICE**

Is all we have to sell.

*We solicit your business*

**Ninth Street Terminal Warehouse Co.**

WM. J. HOGAN, President  
Cleveland, Ohio

CLEVELAND, OHIO

L. WURM MOVING AND STORAGE CO.

Cleveland, Ohio



**Office:**

7903 Superior Ave.  
Rosedale 2741

**Warehouse:**

1328 E. 80th St.  
Rosedale 1198

**Long Distance Hauling a Specialty.**

**Pick Your  
Consignee**

from the companies listed in  
this section—they are the "live  
wires" of the field and will han-  
dle your shipments promptly  
and efficiently.

# CLEVE

**MOTOR TRUCKS GIVE BETTER SERVICE.**

**WE USE THEM**

The  
**KNICKERBOCKER  
STORAGE CO.**  
7724 DETROIT AVE.

The  
**LINCOLN FIREPROOF  
STORAGE CO.**  
5660-5704 EUCLID AVE.

The  
**LAKE SHORE MOVING  
AND STORAGE CO.**  
664 EAST 105TH ST.

The  
**SCOTT BROS. FIRE-  
PROOF STORAGE CO.**  
1838-40 EAST 55TH ST.

Members of National Furniture

# LAND.O

**FIREPROOF WAREHOUSES GIVE BETTER PROTECTION. WE HAVE THEM**

The  
**NEAL FIREPROOF  
STORAGE CO.**  
7208-16 EUCLID AVE.

5 LARGE WAREHOUSES

The  
**REDHEAD  
STORAGE CO.**  
2041 EAST 105<sup>TH</sup> ST.

HOUSEHOLD GOODS EXCLUSIVELY

The  
**EUCLID AVE. FIRE-  
PROOF STORAGE CO.**  
11605-09 EUCLID AVE.

The  
**WINDERMERE  
TRANSFER, MOVING  
AND FIREPROOF  
STORAGE CO.**  
14136 EUCLID AVE.

Warehousemen's Association.



## COLUMBUS, OHIO

THERE IS  
NOTHING TOO LARGE  
NOR TOO SMALL  
FOR US TO HANDLE

## THE BUCKEYE TRANSFER & STORAGE COMPANY

## COLUMBUS, OHIO

Safety First

## The Fireproof Warehouse & Storage Company

1018-30 North High Street  
Columbus, Ohio

### TRANSFERRING — STORING — PACKING

We have one of the finest warehouse plants in the state; being steam heated throughout, equipped with a sprinkler system, absolutely fireproof. The cheapest rate of insurance. Located handy to all railroads, we are able to deliver the best service obtainable anywhere. We solicit your shipments to our city and assure you we will reciprocate. P. A. DOLLE, General Manager.

### Motor Truck Service

Vaults for Valuables

Private Rooms

## COLUMBUS, OHIO

Expert Packers      Reliable Movers  
Absolutely Fireproof

## The Great Western Storage Company

Storing, Crating, Forwarding, Distributing

Car Lots of Merchandise Stored for Distributing

Local and Long Distance Hauling. Separate Sealed Rooms for Household Goods.

Located on the Pennsylvania Lines  
766 to 776 West Broad Street      COLUMBUS, OHIO

## COLUMBUS, OHIO

THE

## KUTSCHBACH-McNALLY Co.

Complete Facilities for Storing and Forwarding  
HOUSEHOLD GOODS and MERCHANDISE

Siding on Pennsylvania Tracks

Manufacturers' Distributors

MOTOR Equipment

Member Interstate Warehousemen's Association

## COLUMBUS, O.

## The Merchandise Storage Company

Columbus, Ohio

General Storage & Distribution

SERVICE THAT WILL SATISFY

## DAYTON, OHIO

## THE LINCOLN STORAGE Co.

"Fireproof"

BIG 4 TRACK IN BUILDING.      Members N. Y. & I. F. W. A.

313-315 EAST FIRST STREET

A. B. Compton, Vice-President

## DAYTON, OHIO

## R. B. TAWNEY

Long Distance Hauling a Specialty

Furniture and Pianos Stored and Packed for Shipping

427 HICKORY ST., DAYTON, OHIO

'Phone, Fairview 3234—Home 'Phone, Fairview 2515

## DAYTON, OHIO

## THE UNION STORAGE CO.

U. S. BONDED

BAINBRIDGE, BACON & STATE STREETS

MERCHANDISE STORAGE      TRANSFER      DISTRIBUTION

## MANSFIELD, OHIO

## THE COTTER TRANSFER AND STORAGE CO.

FIREPROOF AND NON-FIREPROOF  
WAREHOUSES

Furniture and Merchandise Storage

Motor Trucks

Heavy Hauling

Distributing

*The Cotter System*

Members New York, Illinois and American Warehousemen's Assns.

## SPRINGFIELD, OHIO

Bill All Shipments for Springfield, Ohio, to

## WAGNER FIREPROOF STORAGE & TRUCK CO.

Siding on Pennsylvania Lines

Complete Facilities for Distribution of Pool Car Shipments  
Moving—Packing—Shipping—Storing  
Household Goods and Merchandise

## TOLEDO, OHIO

## DEPENTHAL TRUCK & STORAGE COMPANY

108 SUMMIT STREET

Member of New York, Illinois, and Southern Furniture  
Warehousemen's Associations

## TOLEDO, OHIO

## THE GENERAL FIREPROOF STORAGE CO.

651-655 STATE STREET

*Household Goods Exclusively*

Members:      Illinois Furniture Warehouse Association  
American Warehouse Association

## TOLEDO, OHIO

## THE TOLEDO MERCHANTS' DELIVERY COMPANY

128 SUMMIT STREET

AUTO SERVICE—FIREPROOF STORAGE

Household Goods and Automobiles Moved, Packed, Shipped and  
Stored. Safes, Boilers, Machinery and Smokestacks Moved.

100% SERVICE

Reference: Second National Bank, or any bank in Toledo

## TOLEDO, OHIO

## The Toledo Terminal Warehouse Co.

928-930 GEORGE STREET

TOLEDO, OHIO

STORAGE OF MERCHANDISE  
Special Attention to Pool Car Distribution

## YOUNGSTOWN, O.

The  
**Fisher-Gilder Cartage & Storage Co.**  
Fireproof Storage, Moving, Packing and Shipping



**Expert Handlers of Household Goods**

Manufacturers' Merchandise Distributors.

Private Siding B. & O. R. R.

**MOTOR TRUCK SERVICE**

90,000 cubic feet of Fireproof Warehouse Space.

Members: American, New York, and Illinois Warehousemen's Associations.

**574-576-578-580 MAHONING ST.**

**YOUNGSTOWN, OHIO**

## YOUNGSTOWN, OHIO

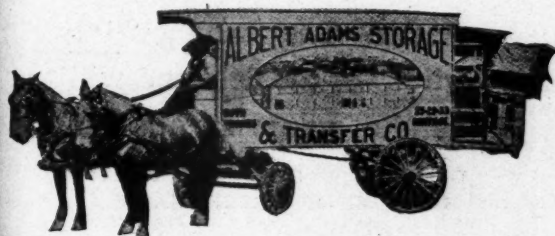


Local and Long Distance Hauling  
Manufacturers' Distributors Carload Distribution

## ZANESVILLE, OHIO

**ALBERT ADAMS  
STORAGE AND TRANSFER CO.**  
25-29-33 Ninth St.

Merchandise and Household Goods  
Manufacturers' Distributors Carload Distribution  
50,000 Square Feet of Floor Space



## OKLAHOMA CITY, OKLA.

Fireproof  
Warehouses for  
Household  
Goods and  
Merchandise.

Members of I. F. W. A.,  
New York, American  
Chain, Central, South-  
ern, Pacific Coast  
Warehousemen's Asso-  
ciation.



**O.K. TRANSFER & STORAGE CO.**

A. C. WEICKER, President

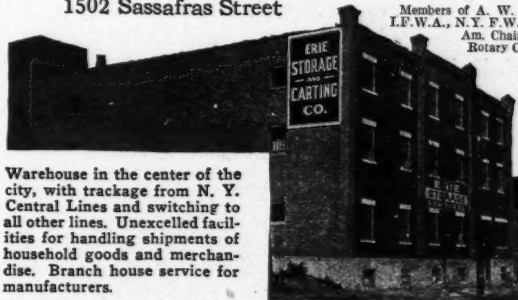
## ERIE, PA.

**ERIE**

**STORAGE & CARTING COMPANY**

1502 Sassafras Street

Members of A. W. A.,  
I. F. W. A., N. Y. F. W. A.,  
Am. Chain &  
Rotary Club



Warehouse in the center of the  
city, with trackage from N. Y.  
Central Lines and switching to  
all other lines. Unexcelled facil-  
ities for handling shipments of  
household goods and merchan-  
dise. Branch house service for  
manufacturers.

## HARRISBURG, PA.

**Pool Cars**

Received-Checked-Distributed  
and

Forwarded in Less Than Car Lots

Penna. RR Harrisburg Storage Co.  
Sidings Harrisburg, Pa.

## HARRISBURG, PA.

**MONTGOMERY & CO.**

**STORAGE WAREHOUSES**

Merchandise Storage—Transferring—Forwarding

Direct Track Facilities

Pool Car Distribution

Members A. W. A. and American Chain of Warehouses

## LANCASTER, PA.

**KEYSTONE STORAGE COMPANY**

**STORAGE—DISTRIBUTORS—FORWARDERS**

Merchandise and Household Goods

**MANUFACTURERS' DISTRIBUTORS MOTOR SERVICE**

Siding on P. R. R. and P. & R.

OIL CITY, PA.

## CARNAHAN TRANSFER & STORAGE COMPANY

R. C. LAY, Proprietor  
Piano Moving a Specialty  
Distributing and Forwarding Agents; Packing  
Fireproof Warehouse

PHILADELPHIA, PA.

## PENN STORAGE & VAN COMPANY

2136 MARKET STREET  
"Let Wightman do it"

PHILADELPHIA, PA.

We Stand for a Square Deal

## International Warehousing Co. General Storage

Delaware Ave., Queen and Swanson St.

Forwarding & Distributing

P. R. R. Siding

PHILADELPHIA, PA.

## Philadelphia LOCAL EXPRESS

1004 1026 Spring Garden Street

Manufacturing Distributors

Philadelphia, Germantown, Chestnut Hill,  
Camden, N. J., Frankford

PHILADELPHIA, PA.



Our large fleet of motor trucks enables us to render quick and efficient service to your patrons.

We are accessible to all depots and suburbs of our city. Our warehouses are within two blocks of North Philadelphia Station of the Pennsylvania Railroad and the 12th and York Streets Station of the Philadelphia & Reading or the Baltimore & Ohio.

Collections through our office will assure prompt returns.

*Fireproof and Non-Fireproof Warehouses*

## Miller North Broad Storage Co.

2709-2721 North Broad Street

PHILADELPHIA, PA.

Established 1903



MANUFACTURERS'  
DISTRIBUTORS

Direct delivery service throughout Philadelphia  
and Camden :: :: Correspondence solicited

*Address*

Office—5th and Byron Streets  
CAMDEN, N. J.

PHILADELPHIA, PA.

## OUR HOBBY

is the distribution of goods for  
National Merchandisers

North Philadelphia Storage Co., Inc.

SHIBE BALL PARK

## Pick Your Consignee

from

the companies listed in this  
section—They are the "live  
wires" of the field and will  
handle your shipments  
promptly and efficiently



PHILADELPHIA, PA.



Columbia Ave. Warehouse  
1511-1519  
Household Goods Exclusively  
Motor Equipment  
Moving—Packing—Shipping

## TERMINAL WAREHOUSE AND TRANSFER CO.

Green Street and  
Delaware Avenue  
PHILADELPHIA



Delaware Ave. and Green St.  
Warehouse  
Water Front  
Pool Car Shipments  
Manufacturers' Distributing

9 Warehouses—16 Acres of Floor Space—Trackage Facilities  
for 17 Cars

Large Organization. Competent Office Warehouse Staff  
Members American Warehousemen's Association—American Chain of Warehouses

PHILADELPHIA, PA.

## Before Shipping to Philadelphia, Pa.

read this letter from the client of a Chicago warehouse who was advised to ship in care of the 20th Century Storage Warehouse Co. On Aug. 18th this is what he wrote them:

"Following your suggestion I got in touch with the 20th Century Warehouse and they handled the unloading of my four freight cars and the uncrating at my house in Haverford. It took them only two days to move all of the furniture from our cars to the house; their men hustled every minute and did their work exceptionally well.

"I thank you for recommending the 20th Century to me and I feel that in the future you will make no mistake in sending other patrons of yours to them."

## 20th Century Storage Warehouse Co.

3120-30 Market Street, Philadelphia

Opposite West Philadelphia Station

PITTSBURGH, PA.



Fireproof  
I will grow four  
more stories



Garage & Stables

## BLANCK'S Transfer & Storage Co.

Moving, Packing and Storage  
MOTOR TRUCK SERVICE—SEPARATE ROOMS FOR STORAGE



Fireproof

6344

Penn

Ave.

E E



Fireproof

PITTSBURGH, PA.

## HASLEY BROTHERS TRANSFER AND STORAGE

939 So. Canal St., N. S.

MOVERS, PACKERS, SHIPPERS OF HOUSEHOLD GOODS  
FIRE PROTECTED STORAGE—MEMBERS A. W. A.

## PITTSBURGH, PA.

SERVICE TO THE  
CORRESPONDENT

CONSISTS in giving the correspondence of those we represent prompt acknowledgment, safeguarding their interests, mailing checks in settlement of accounts, and furnishing final reports of transactions.

THIS service also includes an element of importance:—the handling of shipments upon arrival in a manner conducive to joint customer's approval, whose future business we are always eager to secure.

Ship via Pennsylvania to East Liberty Station, (Pittsburgh, Pa.)

Established 1889

**HAUGH & KEENAN**  
STORAGE AND TRANSFER CO.  
CENTRE AND EUCLID AVENUES

## PITTSBURGH, PA.

**HOEVELER**  
WAREHOUSE COMPANY  
MOVERS AND STORERS

750 MILLVALE AVENUE

## PITTSBURGH, PA.

## Interstate Trucking Company

Twenty-Fifth St. & A.V.R.R. 1, 2, 3½ and 5 ton trucks  
GENERAL HAULING ON HOURLY OR TONNAGE BASIS  
Carload Freight and Long Distance Hauling

Experienced Men—Good Equipment Call on Us—Save Time and Money

Trucking Agents for  
Pennsylvania Transfer and Storage Company

## PITTSBURGH, PA.

**MURDOCH**

STORAGE & TRANSFER COMPANY

General Office, and Warehouses

546 NEVILLE STREET  
PITTSBURGH, PA.

Branch Warehouse, Wilkesburg, Pa.

Murdoch Means Service

## PITTSBURGH, PA.

**Oakland Ex. & Transfer Co.**

Packers, Storers and Shippers of

**HOUSEHOLD GOODS**

229 ATWOOD STREET

## PITTSBURGH, PA.

**J. O'NEIL EXPRESS & STORAGE**

N. S. PITTSBURGH, PENNA.

Furniture and Piano Moving a Specialty. General Hauling.

NEW FIREPROOF STORAGE HOUSE

Separate Rooms

## PITTSBURGH, PA.

**Pennsylvania  
Transfer & Storage Co.**

JAMES SIMPSON, President

EDWARD C. LITTLE, General Manager

Receiving and Warehousing of General Merchandise in Carloads or Less than Carloads.

**POOL CARS DISTRIBUTED AND  
RESHIPPED**

Special Facilities for Handling and Storing Liquors and Barreled Goods.

Merchandise Stocks Carried and Records Kept for Out-of-Town Concerns.

Rates and Quotations Promptly  
Furnished.

**PENNSYLVANIA RAILROAD  
SIDING**

Warehouse No. 1—Twenty-fifth St. and  
A. V. R. R.

**TRUCK DELIVERY ONLY**

Warehouse No. 2—1629 Liberty St.  
General Offices: Twenty-fifth St. and  
A. V. R. R., Pittsburgh, Pa.

**Pick Your  
Consignee**

from the companies listed in this section—they are the "live wires" of the field and will handle your shipments promptly and efficiently.

## PITTSBURGH, PA.

Building 100 x 125—8 Stories Front  
9 Stories Rear—Garage in Basement—Just Completed



### Shanahan Transfer & Storage Company

Fireproof Storage for Household Goods.  
All Separate—1200 Fireproof Rooms.  
Furniture Moved and Packed for Shipment.  
Motor Vans, Trucks. Special Heated Piano Floor  
Fifth Ave. at McKee Place  
(Next Door to You)  
Established 1865. Over 50 Years

## PITTSBURGH, PA.

### WEBER EXPRESS & STORAGE COMPANY

GENERAL HAULING

Moving, Packing and Storing of Furniture and Pianos  
4620 HENRY STREET

## SCRANTON, PA.



Local & Long Distance Hauling  
Manufacturers—Distributors—  
Carload Distributions  
R. F. POST ESTATE.

### If Your City Isn't Represented Here

Put it on the shippers' map by  
inserting your card in this space.

SCRANTON, PA.  
WILKES-BARRE, PA.

Established 1894.

"He Profits Most Who Serves Best"

(Rotary)

## The Quackenbush Warehouse Co.

Incorporated

Warehousing of every description. Storing, Packing  
Carting, Shipping. R.R. Siding. Manufacturers  
Distributors

Correspondence Solicited

Wilkes-Barre, Pa.

Scranton, Pa.

## PROVIDENCE, R. I.

### CADY MOVING & STORAGE CO.

STORAGE WAREHOUSES  
Household Furniture and Pianos  
Packing, Crating and Shipping.  
62 to 70 Dudley Street.

The Men Who Distribute

### United Drug Products

Read DISTRIBUTION & WAREHOUSING  
and consult the Shippers' Index

## A Well Informed Employee Is Your Greatest Asset

TO give the service that your customers expect and are entitled to receive, it is essential that every department head in your organization have an intimate knowledge of modern warehousing.

This knowledge can best be imparted to the various men in your organization by having them read DISTRIBUTION & WAREHOUSING each month.

On the subscription list of DISTRIBUTION & WAREHOUSING are many prominent terminal, warehouse, manufacturing and transportation companies who receive regularly several copies of each issue for their general executives, traffic managers and other department heads.

The subscription price is only \$2.00 per year (\$2.50 west of the Mississippi). Dictate the letter now, giving us the names and addresses of the men in your company who should be receiving this publication each month.

### DISTRIBUTION & WAREHOUSING

239 W. 39th St.

New York, N. Y.



## PROVIDENCE, R. I.

## TERMINAL WAREHOUSE CO. OF RHODE ISLAND

Allen Avenue, foot of Oxford Street on Providence River  
PROVIDENCE, RHODE ISLAND, U. S. A.

Wm. M. Harris, Jr.,  
Treasurer and  
General Manager.  
W. P. MacDonald,  
Superintendent.

**Several Acres of Yard Storage—Sidetrack Capacity 75 Cars—  
Also the most modern Storage Warehouse in New England.**

Lowest Insurance Rates    Shipping Directions:    Good Depth of Water  
Direct Track Connection    South Providence    Weighing, Sampling and Shipping  
N. Y., N. H. & H. R. R.    Rhode Island    by Experts permanently employed.

Our Location centre of the Manufacturing Industries of New England

Deliveries either by Rail or Motor Trucks from our location to most any point  
in New England.



## CHATTANOOGA, TENN.

## THE CHATTANOOGA TRANSFER & STORAGE CO.

Fireproof Warehouse

Furniture                      Merchandise  
Packed    Stored    Shipped  
Heavy Hauling

Motor and Horse Drawn Equipment

## DALLAS, TEXAS

CARLOAD DISTRIBUTION & STORAGE

**Merchandise and Household Goods**

## The Inter-State Forwarding Co.

Cor. Elm & Jefferson St.

The Center of the Wholesale District

120,000 Sq. Ft.  
on T. & P. R. R. Capacity Unloading 12  
Cars Per Day.

Maintains an organization for service in all branches of  
Warehousing and Distribution

W. I. FORD and R. E. EAGON  
Associate Managers

## NASHVILLE, TENN.

E. M. BOND  
FIREPROOF STORAGE CO.  
HOUSEHOLD GOODS AND MERCHANDISE  
Modern Fireproof Building  
Private Siding With All Rail Connections.

The Men Who Distribute  
**Scott Tissue Products**  
Read DISTRIBUTION & WAREHOUSING  
and consult the Shippers' Index

## EL PASO, TEXAS

**R. L. Daniel Storage Co.**

Box 487, 1706 Texas, 2813 Durazno Sts.

Our hobby is the crating, packing, shipping and storing of household goods. Consign your goods to us for proper attention.

Member, National Furniture Warehousemen's Assn.

## EL PASO, TEXAS

**EL PASO, TEXAS  
GATEWAY TO OLD MEXICO****General Storage and Carload Distribution  
Merchandise and Household Goods  
Moving, Packing and Shipping****60,000 sq. ft. Fireproof Storage Space  
150,000 sq. ft. Semi-Fireproof Construction****LET US HANDLE YOUR EL PASO BUSINESS  
AS IT SHOULD BE HANDLED.  
MAKE OUR WAREHOUSE YOUR BRANCH  
HOUSE.****International Warehouse Co., Inc.**  
1601 Magoffin Ave., Cor. Lee St.

P. O. Box 214

MEMBERS CENTRAL WAREHOUSEMEN'S CLUB

## EL PASO, TEXAS

**WESTERN  
TRANSFER & STORAGE COMPANY**

1125-31 TEXAS STREET

**ONLY FIREPROOF STORAGE IN EL PASO**Forwarders and Distributors—Trucking of all kinds—Distribution  
Cars a specialty—Warehouse on Track

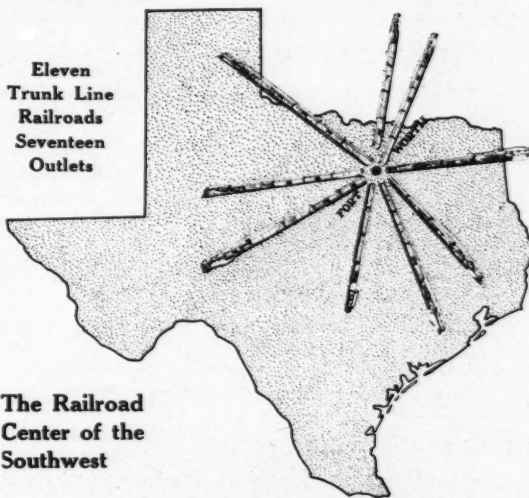
The Men Who Distribute

**Scott's Emulsion**Read **DISTRIBUTION & WAREHOUSING**  
and consult the Shippers' Index

The Men Who Distribute

**Hoosier Kitchen Cabinets**Read **DISTRIBUTION & WAREHOUSING**  
and consult the Shippers' Index

## FORT WORTH, TEX.

**Eleven  
Trunk Line  
Railroads  
Seventeen  
Outlets****The Railroad  
Center of the  
Southwest****Write For Our Booklet**We have prepared a booklet concerning  
Fort Worth, North and West, Texas and  
the Binyon-O'Keefe service.

A copy will be mailed to you on request.

**BINYON-O'KEEFE** Fire Proof  
Storage Co.Members American Warehousemen's Association and National  
Household Furniture Warehousemen's Association.

## FORT WORTH, TEXAS

**Fort Worth Ware-  
house & Storage Co.**

INCORPORATED

**Merchandise Distribution, General Storage  
Manufacturers' Representative****PRIVATE SIDING WITH ALL RAIL  
CONNECTIONS****Fort Worth** with its seventeen railways is the logical  
distributing center for Texas and the Southwest.**Absolutely Fireproof Warehouses**

**SAN ANTONIO, TEX.**

Established 1880  
 FREIGHT AUTO SERVICE STORAGE  
**OFFICIAL DISTRIBUTORS**  
**MERCHANTS' TRANSFER CO.**  
 SAFETY COURTESY SERVICE

**WACO, TEXAS**

**MASON**  
**TRANSFER & STORAGE COMPANY**  
 217-219 JACKSON STREET  
 Merchandise Storage, Forwarders & Distribution Trucking of all kinds. Warehouse on track. 7 Denby Trucks


**WACO, TEXAS**

**Weathered Transfer and Storage Co., Inc.**  
 Modern Warehouse Facilities—Trackage on all roads  
 100,000 SQUARE FEET STORAGE SPACE  
 We do pool car distributing, moving, packing, shipping, storage, long distance hauling by trucks.

**SALT LAKE CITY, UTAH**

SALT LAKE CITY IS A  
**NATURAL DISTRIBUTING CENTER**

We Make a Specialty  
 of Carload Distribution

  
**Warehouse and Storage Company**

**MERCHANDISE WAREHOUSING AND  
 DISTRIBUTION  
 COLD STORAGE**

Served by all railroads

Salt Lake City, Utah

142,000 Square Feet of Floor Space

**PETERSBURG, VA.  
 HOPEWELL, VA.**

Distributing and Forwarding

**POOL CARS**

Furniture stored and crated

**SOUTHERN BONDED WAREHOUSE CORP.****ABERDEEN, WASH.****A. A. STAR TRANSFER CO.**401-403 SOUTH F STREET  
 ABERDEEN WASHINGTON

**WE DO EVERYTHING IN THE  
 LINE OF MOVING**

|           |                    |                 |
|-----------|--------------------|-----------------|
| Our Hobby | Equipped to Handle | Distributors of |
| CRATING   | SAFES              | FREIGHT         |
| PACKING   | PIANOS             | H.H. GOODS      |
| STORAGE   | MACHINERY          | BAGGAGE         |

Consign Your Shipments to Us for Proper Attention

**SEATTLE, WASH.**

**Duggan Transfer  
 Company**

**SEATTLE TACOMA**  
 Pool Car Distributors  
 Fire Proof Warehouse

**SEATTLE, WASH.****United Warehouse Company****SEATTLE, WASH.**

Established 1895

**GENERAL STORAGE AND DISTRIBUTING**

**Pick  
 Your Consignee**

from

the companies listed in this  
 section—They are the “live  
wires” of the field and will  
 handle your shipments  
 promptly and efficiently



## SPOKANE, WASH.

**McAllister Warehouse Company**

W. E. Burke, Manager

Warehouse No. 1

Commercial

50,000 Feet

Members

Am. Warehousemen's Assn.

Central Warehousemen's Club

Warehouse No. 2

Cold Storage

30,000 Feet

**Mr. TRAFFIC MAN and DISTRIBUTOR**

WAKE UP to the advantages of SPOKANE as a distributing point for your product, no matter what it is.

SPOKANE is the HUB of a territory 200 miles each way which contains 800,000 people.

FIVE Transcontinental and SEVEN Local Railway Lines serve this section. AGRICULTURE, LUMBERING and MINING provide a steady flow of business which shows a large increase each year.

YOU HAVE the goods to sell—WE HAVE all the facilities for their distribution.

TRAFFIC MANAGERS will find us ready to co-operate with them and to conform to their methods.

OUR WAREHOUSES, on our private switches, OWNED—not leased.

SEATTLE SERVICE ALSO through connections at that point.

## TACOMA, WASH.

**WE OWN BOTH WAREHOUSES**

Established 20 years in Tacoma—and know how to handle your requirements

Storage (bonded and free) Merchandise and H. H. Goods

Moving and Packing by Experts C. L. & L. C. L. Distribution

Collections Remitted Promptly

We Solicit Your Business

## YAKIMA, WASH.

**MILLER & LENINGTON**

CONTRACTORS

DISTRIBUTING and FORWARDING AGENTS

TRANSFER—STORAGE—WAREHOUSING

Motor Trucks and Team Equipment for All and Every Kind of Hauling

SHIP IN OUR CARE and let us be "At your service with best of service"

Office: 10 East A Street

Sidney Hotel Bldg.

'Phone 571

## TACOMA, WASH.

**PACIFIC STORAGE and TRANSFER CO., Inc.**

Merchandise and Furniture Storage

Distributors and Forwarders

Merchandise and Furniture

SEND YOUR POOL CARS IN OUR CARE

Auto Truck and Transfer Service

N. P. RY. SIDE TRACKS

BROADWAY AND 17th STREET



## YAKIMA, WASH.

J. J. CRAWFORD, PRES.

E. NORTON, SEC.

**YAKIMA TRANSFER & STORAGE CO.**

Office and general storage warehouse No. 25 North Front directly opposite Northern Pacific passenger station.

22,000 square feet of compartment storage for household goods, pianos etc.

Track warehouse No. 11 South First Ave, 30,000 square feet of floor space devoted exclusively to the storage of merchandise. Every facility for clean, economical, storage and handling of commercial accounts.

Auto trucks and teams.

**CHARLESTON, WEST VA.****Mathews Storage & Transfer Co.**

Warehousing—Distributing—Forwarding—Transfer  
Merchandise—Automobiles—Household Goods  
Brick and Concrete Warehouses—Private Ry. Siding.

Members: ..... { American Warehousemen's Ass'n  
American Chain Warehouses  
Motor Truck and Team Service.

**MADISON, WIS.****N. F. SHARRATT**

30,000 sq. ft. Fireproof Storage—New Building  
30,000 sq. ft. Non-fireproof Storage

Household Goods—Mdse.—Automobiles

Separate Locked Rooms Local and Long Distance Moving  
Separate Piano, Rug and Trunk Packing—Shipping  
Rooms Heavy Hauling  
Negotiable Receipts Distributing

**MADISON, WISC.****Finest Warehouse in Wisconsin**

PHONE  
BADGER 1254

FURNITURE  
PACKING

Local and Long Distance Moving

**Distribution & Warehousing**

is the

**Connecting Link**

between the

**Shipper and the Warehouseman**

It serves each to the benefit of both.

Many big, nationally known business houses subscribe for several copies each so that all the men who handle their distribution and shipping may benefit by reading it regularly. It costs but \$2.00 a year (\$2.50 west of the Mississippi).

**Distribution & Warehousing**

239 West 39th Street

New York

**A Well Informed Employee  
Is Your Greatest Asset**

**T**O GIVE the service that your customers expect and are entitled to receive, it is essential that every department head in your organization have an intimate knowledge of modern warehousing.

This knowledge can best be imparted to the various men in your organization by having them read **DISTRIBUTION & WAREHOUSING** each month.

On the subscription list of **DISTRIBUTION & WAREHOUSING** are many prominent terminal, warehouse, manufacturing and transportation companies who receive regularly several copies of each issue for their general executives, traffic managers and other department heads.

The subscription price is only \$2.00 per year (\$2.50 west of the Mississippi). Dictate the letter now, giving us the names and addresses of the men in your company who should be receiving this publication each month.

**DISTRIBUTION & WAREHOUSING**

239 West 39th St.

New York, N. Y.

The rapid success of the Kelly-Springfield Caterpillar tire has been the logical result of its unique qualities.

It was the first cushion type tire suitable for use on trucks of all weights and sizes, and it offered to truck owners a combination of traction, resiliency and mileage such as they had never before been able to get in *any* type of tire.

Its first cost is lower than that of a big pneumatic and its excess mileage alone makes it far more economical than the ordinary solid.

In almost every instance where a fleet-owner has tried out a set of Kelly Caterpillars on one of his trucks, it has been only a question of time before his whole fleet was rolling on Caterpillar equipment.

## KELLY-SPRINGFIELD TIRE CO.

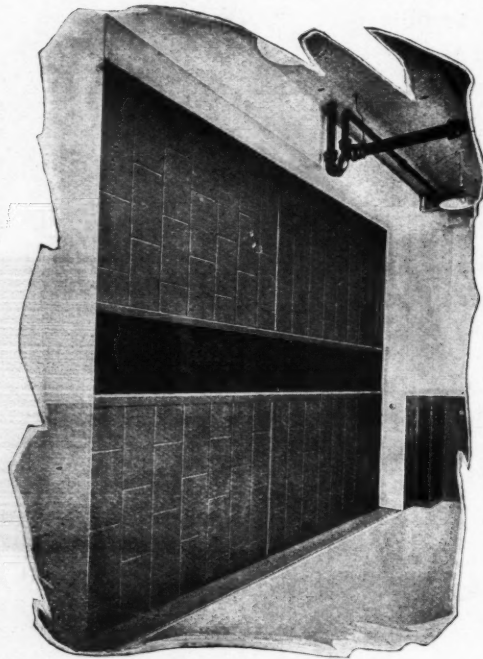
GENERAL SALES DEPARTMENT

1710 Broadway

New York







*Ask your architect!*

Your copy of "Elevator Door Efficiency" is ready. Write for it. The best is the most imitated. Avoid imitations termed "PEELLE Type", "PEELLE Style", etc.

# PEELLE

COUNTERBALANCED - TRUCKABLE

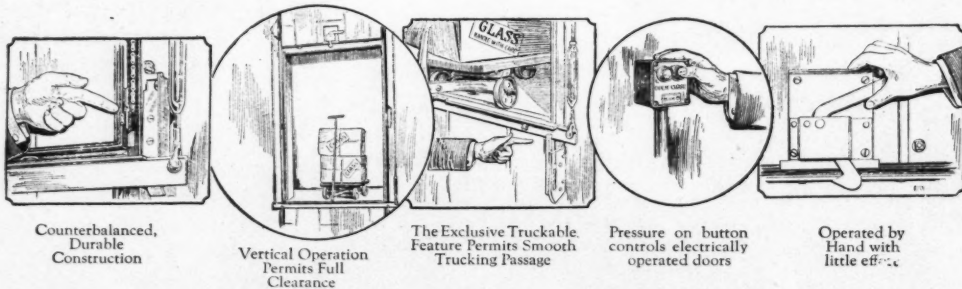
## Freight ELEVATOR DOORS

WHATEVER your elevator door requirements may be, submit them to a specialist in whom you have absolute confidence—your architect, for instance.

Your architect has observed that the installation of PEELLE Doors makes for immediate efficiency. He knows that PEELLE Doors have fewer replacements—their sturdy construction gives them longer life. Elevator operators find them easy to operate, either manually or electrically, because their operation is scientific.

Their steel framed panels are absolutely fireproof. Trucks pass smoothly into or out of elevators because of the truckable feature. And their vertical movement accomplishes a saving of floor space, and permits full clearance for loading and unloading quickly.

When your architect specifies PEELLE Doors, he knows they will solve your elevator door problems—he knows they are the direct-way to elevator door efficiency.



Counterbalanced,  
Durable  
Construction

Vertical Operation  
Permits Full  
Clearance

The Exclusive Truckable  
Feature Permits Smooth  
Trucking Passage

Pressure on button  
controls electrically  
operated doors

Operated by  
Hand with  
little effort

## THE PEELLE COMPANY

Stewart Avenue and Harrison Place  
Chicago, Philadelphia, Boston, Cleveland

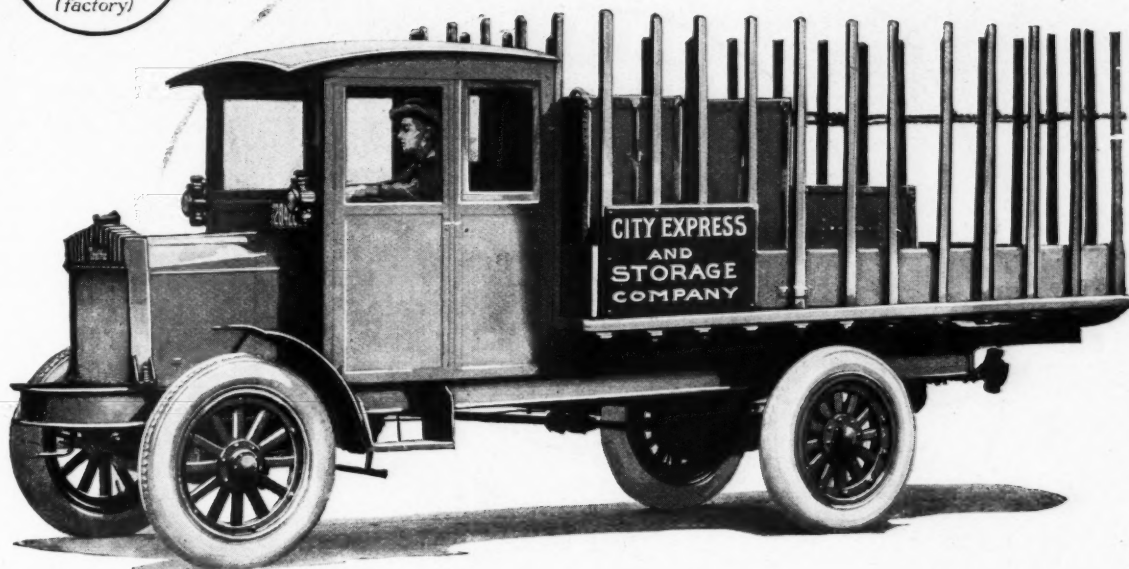
: : : Brooklyn, New York  
Canada: Toronto, Montreal, Winnipeg

**Put your Elevator Door Problems up to Peelle**

# Traffic Truck

4,000 LBS. CAPACITY

(chassis)  
\$1595  
(factory)



The economy of the motor truck for hauling is no longer questioned—the question is which motor truck presents the greatest economy.

Thousands of owners, including many storage warehousemen and expressmen, have found the answer in the Traffic, **the lowest priced 4,000-lb. capacity truck in the world.** It saves hundreds of dollars in first cost, hundreds of dollars in maintenance cost, and cuts in half the cost of hauling with teams.

Specializing, standardizing and quantity production of 4,000-lb. capacity trucks only have made the Traffic's low price possible.

Write for Catalog Today

Traffic Motor Truck Corporation, St. Louis, U.S.A.



## "Horse Sense"



Instead of measuring the worth of a motor truck by its price—measure the price by its worth.

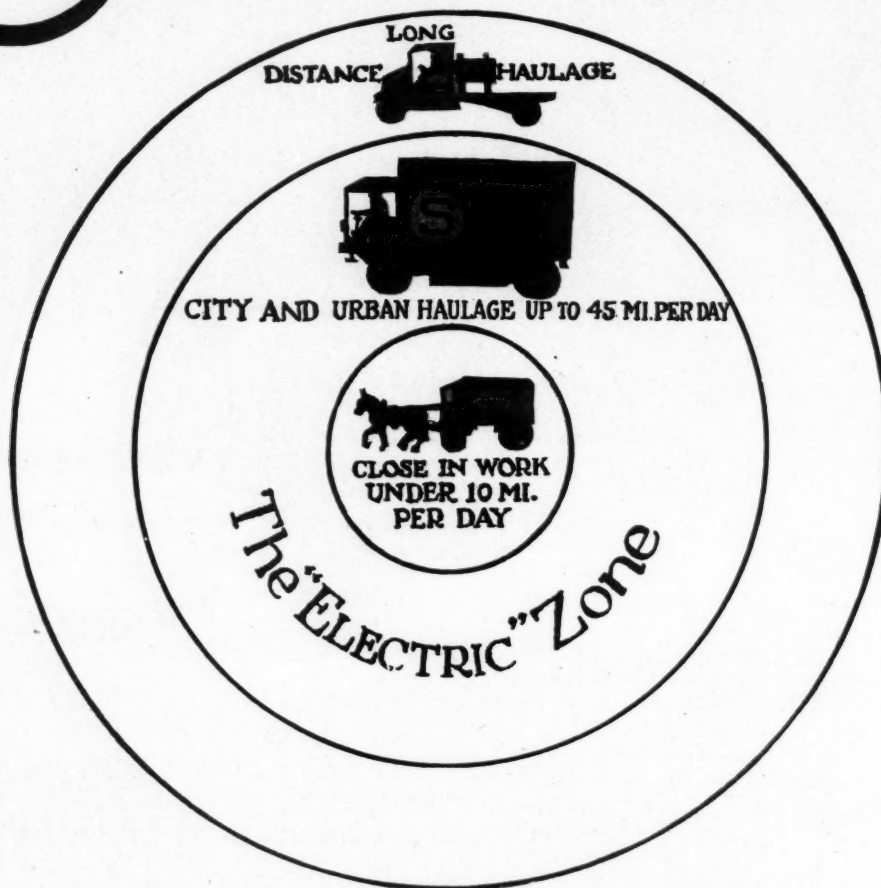
Facts are the "eye-teeth" of truth—those who realize the wisdom of sticking to them have "horse sense."

"Investigate before you buy" is synonymous with "look before you leap."

Largest Exclusive Builders of 4000 lb. Capacity Trucks In The World



THE ELECTRIC STORAGE BATTERY CO.



## Real Haulage Efficiency

demands the "Electric." In its zone it is the most economical, reliable and efficient vehicle in service today. This is a fundamental fact, the verdict of 100 industries who use them and attested to by over 8000 in daily service.

The "Electric" is not affected by temperature; in hot or cold, wet or dry weather it can be relied upon for day-in and day-out service.



THE ELECTRIC STORAGE BATTERY CO.





# BUY THE "ELECTRIC"

The  
**Exide=**  
**Ironclad**  
Battery



The most efficient source of power  
for every electric truck is

## The **Exide=Ironclad** Battery

Built by the largest manufacturers  
of storage batteries in the world, it  
possesses every feature of every other  
battery with added advantages not  
possessed by any other battery.

It is the only battery built that  
possesses a combination of abund-  
ance of Power, Pep and High Effi-  
ciency with Ruggedness and Long Life.

The "Electric," equipped with the  
Exide-Ironclad Battery, is the answer  
to real haulage efficiency. Get the  
facts—write for our book, "Keep  
Them Moving."

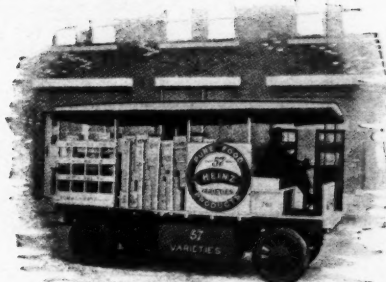
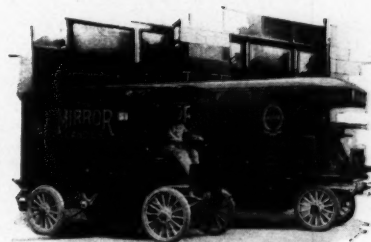
### THE ELECTRIC STORAGE BATTERY CO.

Oldest and largest manufacturers in the world of Storage Batteries for every purpose

1888 PHILADELPHIA 1920

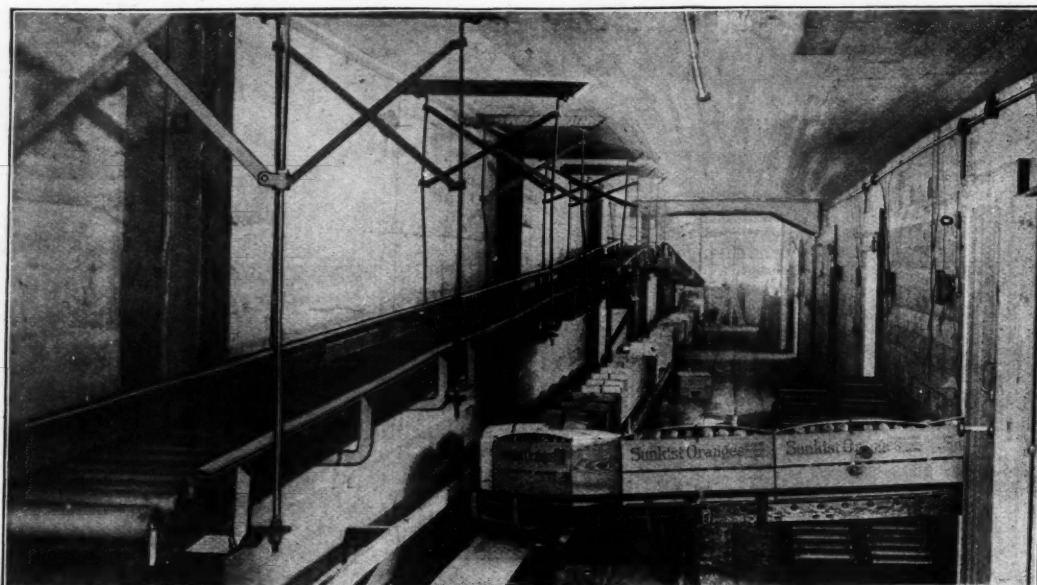
Branches in seventeen cities

Special Canadian Representatives: Chas. E. Goad Engineering Co., Limited  
Toronto and Montreal



Exide-Ironclad Batteries are assembled  
in guaranteed "Giant" Jars. Illus-  
tration shows "Giant" Jar support-  
ing weight of four men

## THE ELECTRIC STORAGE BATTERY CO.



Wherever Mathews Conveyor systems are on the job, system, order and speed take the place of confusion and delay. And nowhere is the contrast sharper than in warehousing and transfer. Besides the time and labor saved, think of the floor space the Mathews saves! The above view is an example—a two-way conveying route occupying but one floor area—and that less than a trucking or wheeling path would require.

## Let Gravity do the Lugging

What is your present method of conveying commodities—from floor to floor, packing room to shipping platform, to and from cars, trucks, etc.? The human wheel-lug-and-carry system is obsolete. Its drudgery involves a class of labor that can't be other than indifferent, unreliable, inefficient. And wages are exorbitant! Use less of it!

There's *Gravity*—free as the air you breathe! No wages; no fuel; no looking after; and no limit to the supply! Loads of it about every warehouse, plant, yard, siding, operation. Inexhaustible latent energy simply awaiting a Mathews harness in order to cut your handling costs in half.

Mathews Gravity Conveyers—with their seamless drawn-steel and ball-bearing rollers—answer practically every conveying need or problem, indoors or out. They convey most any-

thing most anywhere. Built sectionally, installed permanently or used portably. And where there's an unavoidable lift there's a Mathews Automatic Elevator to help out; a Mathews Spiral Chute where a quick descent is permissible.

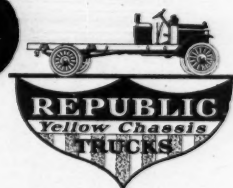
Consider the Mathews—its saving, in labor, in power, in time, in confusion, in floor space. Consider the interest you'll derive from looking through our new catalog showing a range of Mathews Conveyor applications (actual installations) you never dreamed possible. Consider the interesting story to be had from letting one of our nearby branch sales engineers go over your own particular conveying problems. Then write for either—the book or the man.

**MATHEWS GRAVITY CARRIER CO.**  
134 Tenth Street, Ellwood City, Pa.

Branch Factories:  
Port Hope, Ontario      London, England

**MATHEWS**  
SPEED ECONOMY  
**GRAVITY ROLLER CONVEYER**

# REPUBLIC TRUCKS



## BUY REPUBLIC TRUCKS

Republic construction, assuring ruggedness and performance, contributes its important part to the world's need for dependable transportation. Maintenance of two thousand fully equipped service stations and seven National Parts Depots gives positive and uninterrupted service to owners of Yellow Chassis trucks everywhere.

Republic Truck Sales Corporation, 948 Michigan Avenue, Alma, Michigan

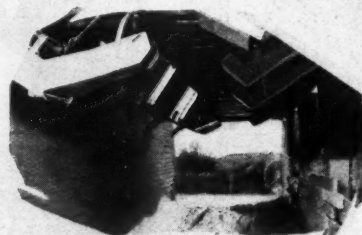




YESTERDAY—Unloading a 50-ton carload of coal the old way took 2 men 15 hours.



TODAY—The Kisel engineered way. Empties a 50-ton carload in 10 minutes by dumping through bottom of car into bins inside loading shed, saving 14 hours, 50 minutes.



Loading chutes inside sheds connected direct with bins.

# KISSEL

## Engineering Service

by a corps of transportation engineers of specialized ability, plus 14 years' experience advising on transportation equipment in over 200 lines of business

## Goes Beyond Truck Building

by quickly building up a profit for you besides having equipment pay for itself in a short time.

In addition to solving specific trucking problems peculiar to your business, Kisel engineering service will prove that in any transportation problem, if properly designed truck, adaptable body and efficient methods of handling commodities are employed, it is not a case of "can you afford a truck with proper equipment" but a case of "how you cannot afford to employ motor trucks unless properly designed and equipped, and most efficient methods employed for handling commodities."

Illustrations show only one of the many instances of how Kisel efficiency engineering is applied with resultant decreased operating costs and increased efficiency.

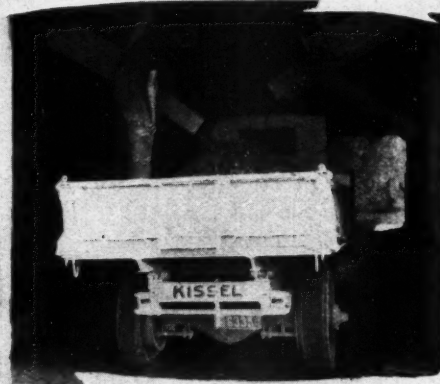
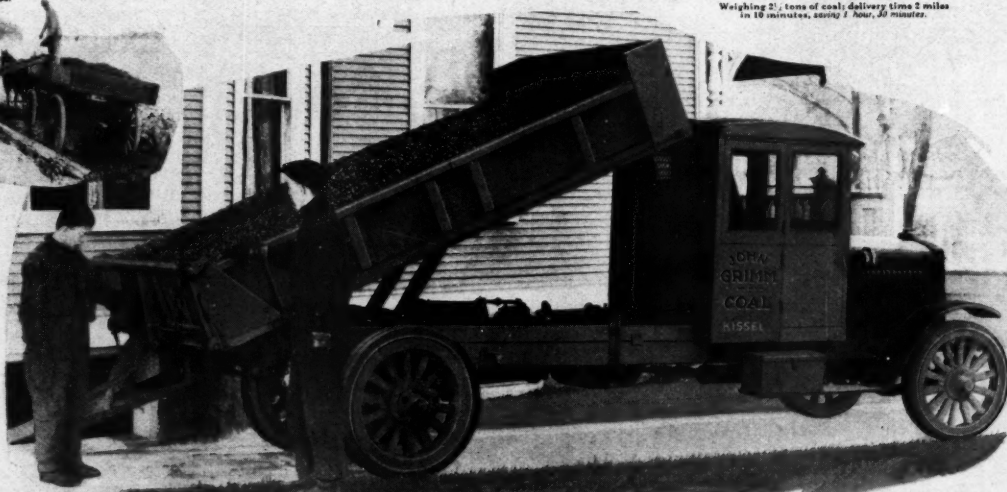
Kisel Motor Car Co., Hartford, Wis., U. S. A.

Originals of ALL-YEAR Cab for Trucks.

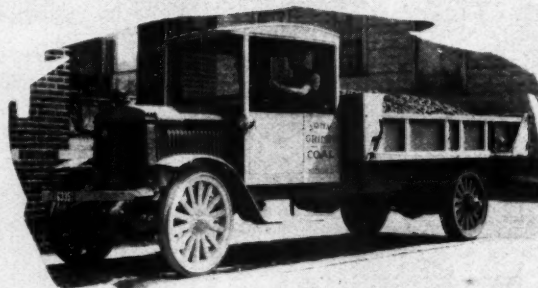
YESTERDAY—Unloading 2 tons of coal the old way took 4 men 30 minutes.



TODAY—Unloading 2 1/2 tons of coal from Kisel dump and haul truck takes 2 minutes, saving 28 minutes.

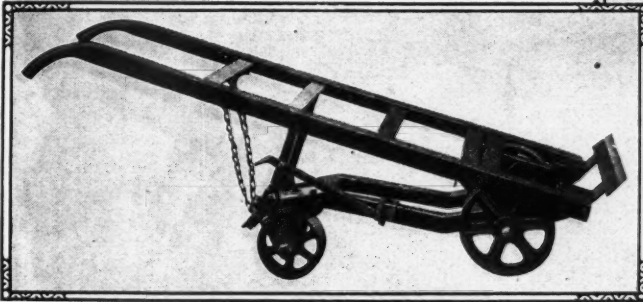


Loading 2 1/2 tons of coal from chutes in 2 minutes, saving 23 minutes.

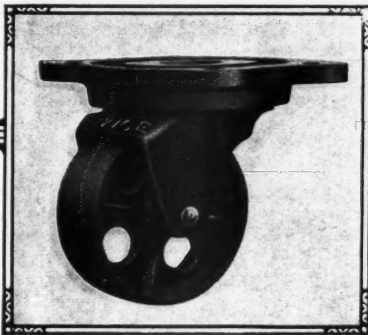


Weighing 2 1/2 tons of coal; delivery time 2 miles in 10 minutes, saving 1 hour, 40 minutes.

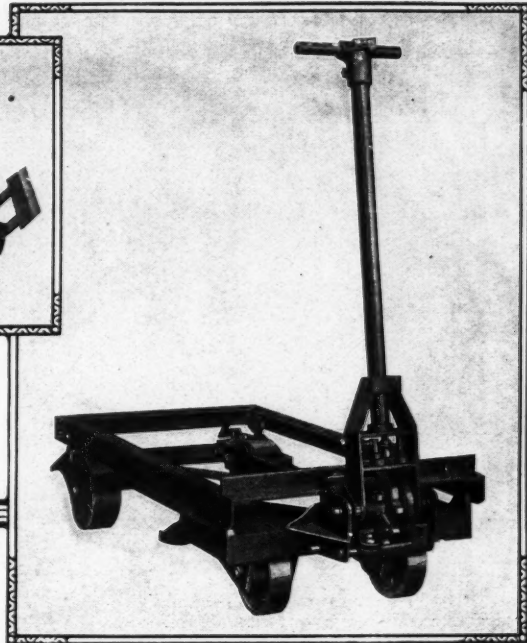
# SERVICE *labor saving* EQUIPMENT



All the load is carried by the Tri-Wheel truck—a tremendous saving of your truckman's energy. With it he can easily handle more than 1,500 pounds.



Service Casters swivel entirely on a double circle of steel balls. An exclusive feature making them practically unbreakable. Special sizes for special needs.



The Eleveyor lift truck works swiftly and smoothly. No jerks that jar the load and break down the truck. The Eleveyor system is most economical transportation because the truck operates so efficiently, is so sturdily built.

## Every Unit Produces Quicker, More Economical Transportation

### For instance:

Service Casters have eliminated "caster breakage" as an item of expense. Their frictionless pivot construction under the roughest usage has given results heretofore unheard of!

The automatic lifting and lowering device of the Eleveyor has done away with the hydraulic check, always a source of annoyance, adjustments and broken trucks.

Every unit of Service Equipment is of improved design—of advanced engineering.

In view of such forward steps it is only natural that many of the largest industries should standardize their entire transportation systems on Service Equipment.

The highest quality materials are used, the most exacting standards of workmanship maintained, in manufacture.

We would like to send literature on the units in which you are most interested.

### They use Service Equipment—

Swift and Co.  
Nordyke and Marmon Co.  
Western Electric Co.  
Sears, Roebuck and Co.  
H. W. Johns-Manville Co.  
Avery and Co.  
Diamond State Fibre Co.  
Wilson and Co.  
Mitchell Motor Car Co.  
Cupples Tire Co.  
The Palmolive Co.

SALES OFFICE  
TRANSPORTATION BLDG.  
CHICAGO, ILL.

**THE Service**

**CASTER & TRUCK CO.**

FACTORY AND GENERAL OFFICES  
KANSAS CITY, MO.

SALES REPRESENTATIVES  
IN PRINCIPAL CITIES

# HIGHWAY TRAILER

EDGERTON  
WISCONSIN

*The Largest Trailer Plant in the World*



*The Public Service  
Company of Chicago  
cuts haulage costs 50% by  
the use of Highway Trailers*

## Instead of Another Truck Add a Highway Trailer

***Save \$1900 to \$4000 in First Cost and  
\$3000 to \$7500 Yearly in Operation***

Why add more trucks to increase haulage capacity.

You can double the hauling and earning ability of your present truck with a Highway Trailer.

Size for size they add just as much to your haulage capacity as extra trucks.

And you save from \$1900 on the 1½ ton size to \$4000 on the 6 ton size.

Saving in operation costs are even greater. They average from \$3000 to \$7500 a year on each unit. No extra driver hire. Less than 10 per cent added fuel and tire costs, will

operate a Highway Trailer on your truck equipment.

The superiority of Highway Trailer construction is proved by the fact that it was the only trailer accepted without design change by the United States Government which operates more than \$1,000,000 worth.

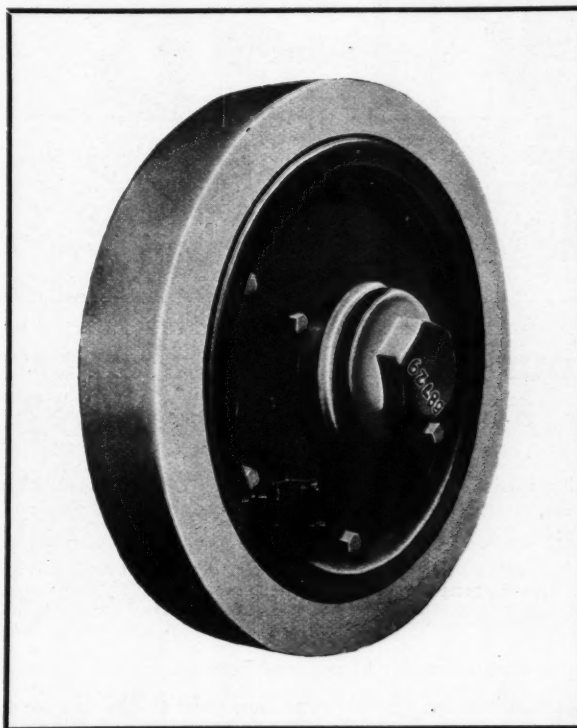
If you do not know the nearest Highway Trailer dealer we will gladly supply his name and address.

Write for booklet on "How to Save \$3000 to \$6000 a Year Per Unit, with Highway Trailers."

**See What Highway Trailers Save**

|                       | 1½ Ton | 2½ Ton | 4 Ton  | 6 Ton  |
|-----------------------|--------|--------|--------|--------|
| Average Truck Costs   | \$2700 | \$3600 | \$4150 | \$5700 |
| Highway Trailer Costs | \$785  | \$995  | \$1325 | \$1695 |
| Highway Trailer Saves | \$1915 | \$2605 | \$2825 | \$4005 |





We do not recommend *rubber tired* wheels on trailers! Neither do we recommend *iron wheels* for trailers.

Ten years' experience prompts us to recommend something

***More Durable***

***Less Expensive***

***Less Bother***

May we tell you more about *Divine Canvas Cushion Wheels* fitted with Hyatt bearings made by Divine Brothers Company of Utica, N. Y.



## Is Your Motor Truck Investment Adequately Insured?

Progressive business men and concerns insure their motor equipment. No doubt you do, too. But in placing this insurance have you considered these vital factors:

- 1—Are you **adequately** insured both as to amount and coverage?
- 2—Does the company in which you are insured have sufficient financial strength?
- 3—Has it a reputation for liberal and prompt settlements?
- 4—Has it facilities for quickly repairing your trucks in case of damage?

### Insist on a North America Policy

It costs no more than ordinary insurance and guarantees maximum safety with the broadest possible protection.

A North America automobile policy covers Fire, Theft, Collision and Property Damage. Its thousands of agencies throughout the United States assure speedy settlement of all claims and prompt repairing of damaged trucks.

*Any agent or broker can get you a North America policy*

## Insurance Company of North America Philadelphia

Capital \$5,000,000

Writers of Fire, Marine, Baggage, Parcel Post, etc.

Founded 1792

*Fill out and mail this coupon and we will send you data*



INSURANCE COMPANY OF NORTH AMERICA.  
232 Walnut St., Philadelphia

Without obligating me in any way, send me full information as to automobile insurance covering the hazards I have checked off.

Name .....

Address .....

Number of Trucks .....

- |                          |                 |
|--------------------------|-----------------|
| <input type="checkbox"/> | Fire            |
| <input type="checkbox"/> | Theft           |
| <input type="checkbox"/> | Collision       |
| <input type="checkbox"/> | Property Damage |

**Higher piles  
lower labor costs**



## **Faster loading means more trips per day**

**T**HE time a REVOLVATOR saves in loading and unloading trucks can be turned into extra deliveries per day.

With a REVOLVATOR two men can load or unload a truck in less than half the time, with less than half the energy that it ordinarily takes a "gang" by the old "push it up the skid" method.

All REVOLVATORS are mounted on wheels and can be shoved from place to place by one man.

The revolvable base type machine has a loading platform that can be turned and locked in four different positions.

This feature belongs to the REVOLVATOR exclusively.

Let us tell you more about the REVOLVATOR and how it will increase your storage capacities—save labor—and expedite your piling whatever it may be. Send for bulletin T-60.

***A machine to suit your piling  
Not piling to suit a machine***

There are nine standard models of the REVOLVATOR—Hand, Motor, and Combination Hand or Motor operated in Revolvable, Non-Revolvable, and open end Bases—a type to suit the piling peculiarities of any business.

**REVOLVATOR CO.**

389 Garfield Ave., Jersey City, N. J.

# **REVOLVATOR**

REG. U. S. PAT. OFF.



If It's  
Made  
of  
Canvas  
We  
Make  
It



Write  
for  
Stock  
List  
and  
Catalog

Waterproof Storm Covers for Auto Trucks, Wagons and Horses, Tarpaulins, Dust Covers, Piano Covers, Victrola Covers, Tents, Horse Feed Bags, Radiator and Hood Covers, Furniture Loading Pads, Van Liner Pads, Canvas Pads and Bags of every description.

*Large Stock—Prompt Deliveries*

**RICHARDS MFG. CORPORATION,** Philadelphia, Pa.

MAIN OFFICE AND FACTORY: 948-952 NORTH 8th STREET

*FROM STOCK*  
*A Complete Building in a Single Shipment*



Blaw-Knox Prudential Steel Buildings are made in all widths from 8 to 50 feet, and in any length.

Blaw-Knox Prudential Steel Buildings are universal in application, filling the needs of industrial plants as light manufacturing buildings or as storage and warehousing space—and just as well adapting themselves to service as bunk houses, tool sheds, pump houses, field offices—in fact, every conceivable use.

Weatherproof, fireproof and staunch—permanent structures—not temporary buildings. Write, wire or phone our nearest office.

**BLAW-KNOX**  
PITTSBURGH, PA. COMPANY NEW YORK BOSTON CHICAGO  
DETROIT-SAN FRANCISCO



## The New Jackson Fireproof Warehouse

for which construction contracts were closed on Mar. 22nd, is progressing without interruption and will be under roof by Oct. 1st.

A detailed description of this building appears elsewhere in this issue of "Distribution and Warehousing" to which your attention is called.

*Further information will be furnished by addressing*

**George S. Kingsley**

*Architect*

109 N. Dearborn St.

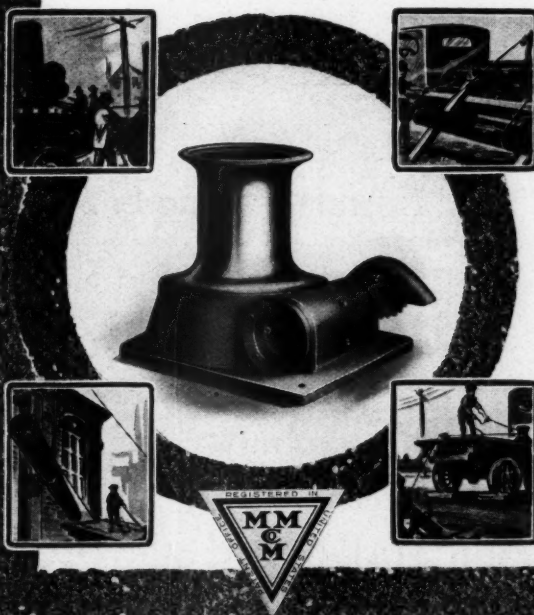
Chicago



New Jackson Warehouse now under construction at 5049-5053 W. Madison St., Chicago. Geo. S. Kingsley, Architect.

## MEAD-MORRISON SERVICE

LIFTS THE LOAD OF INDUSTRY



The Mead-Morrison Motor Winch is designed for use along unrestricted lines. A great deal of its value lies in its adaptability.

Whether your problem is moving heavy machinery, steel for building purposes, or handling cable, the Motor Winch will do your work quickly and efficiently. And it will be equally adaptable for other and varied uses.

No problem is too intricate for our efficient combination of utility and service. Mead-Morrison Engineers see to it that the purchaser gets not only the proper equipment, but that each piece is utilized to assure maximum usefulness.

### TRUCK WINCH DISTRIBUTORS

|                                 |                     |
|---------------------------------|---------------------|
| Auto Truck Equipment Co.        | Pittsburgh, Pa.     |
| Edward R. Barton                | San Francisco, Cal. |
| Horizontal Hoist Co.            | Chicago, Ill.       |
| Hummel Mfg. Co.                 | St. Louis, Mo.      |
| Interboro Hoist & Body Co.      | Brooklyn, N. Y.     |
| Kunkel Wagon Co.                | Baltimore, Md.      |
| Mansfield Steel Corp.           | Detroit, Mich.      |
| Motor Truck Equipment Co.       | Philadelphia, Pa.   |
| William Ogden                   | Indianapolis, Ind.  |
| Springfield Commercial Body Co. | Springfield, Mass.  |
| The Truck Engineering Co.       | Cleveland, Ohio     |

**MEAD-MORRISON  
MANUFACTURING COMPANY**

927 Prescott St.

East Boston, Mass.



A Lewis-Shepard truck operating in one of the Tripp Warehouse Company's plants

## \$50.00 or \$5.00

Take your choice. If you prefer to pay the high price for trucks, you can do so, but you'll get no more for your money—you will get less, for your men will have to rehandle all your loads—and wheel trucks take up room, too.

You can certainly handle some of your loads on platforms if not all.

Read what one of the leading warehousemen has to say about Jacklift:

Indianapolis, Ind.

"We find Lewis-Shepard trucks to be a great labor saving device, as one man and a truck perform the work of about four men. We can load about two tons on each platform. The platforms then are conveniently moved about the warehouse by the use of this truck."

Yours respectfully,

Tripp Warehouse Company,  
M. M. Bowen.

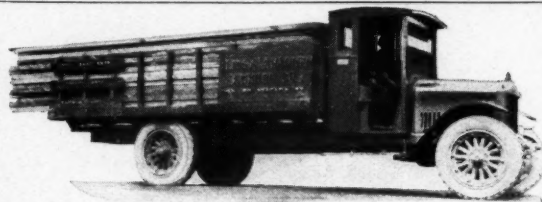
\* They are all coming to Jacklifts. How long will you wait? Let us tell you more about them—let us prove—if possible—that you can save money with them.

Don't confuse the Jacklift with the ordinary elevating truck. It is much more because it

Lifts Higher—Easier—in less space and stands the gaff.

**Lewis-Shepard Company**  
581 E. First Street      Boston 27, Mass.

Offices in the Principal Cities



## This Jumbo Truck Has Run Over 14,000 Miles Without Repair

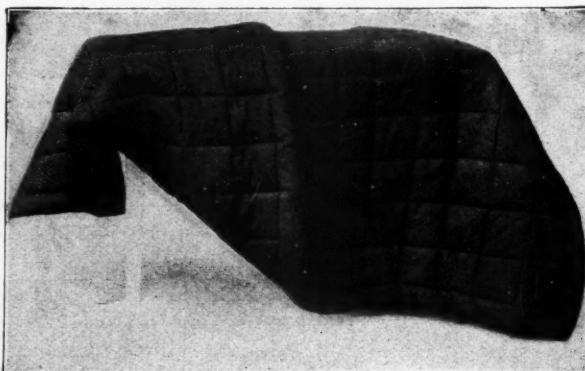
The Jumbo Truck pictured above has run every working day since June, 1919, without repair or replacement of any parts. It is in the service of Bliss & Van Auken Lumber Company and has gone between 14,000 and 15,000 miles.

Quality of design, workmanship, and materials speak for themselves in such a record. Many Jumbo owners with records of 20,000 to 30,000 miles have not replaced a single part in over three years' hard service. The replacement cost for all Jumbo Trucks averages less than \$10 per year per truck.

Such performance covering all conditions of roads and loads, and many different lines of business, makes it worth your while to find out all about Jumbo Trucks. 10 Models with 6 capacities from 3,000 to 8,000 pounds.

Write Today for Booklet

**NELSON MOTOR TRUCK CO., Saginaw, Mich.**



## The "Protecto" Wagon Pad

will deliver your furniture without a scratch.

Made of heavy drill denim, cotton filled.

Note that pad is **STITCHED IN SQUARE BLOCKS** preventing the cotton from bunching.

Made in three standard sizes:

No. 12 Cut size of cloth 72 x 80

No. 14 Cut size of cloth 54 x 72

No. 16 Cut size of cloth 36 x 72

Phonograph Covers.

**CHICAGO QUILT MFG. CO.**

1133 Roosevelt Rd.

Chicago, Ill.



DRY STORAGE

COLD STORAGE

## What Is a Cheap Warehouse?

A cheap warehouse is one which owing to good design and the use of proper materials makes the largest per cent of return on investment.

Good design means economical operation, low upkeep, low insurance rates, and low depreciation.

A warehouse like a motor truck must deliver the goods or it is worthless.

For Real Service Consult

**M. R. CARPENTER**

ARCHITECT and REFRIGERATING ENGINEER  
72 W. Washington St., CHICAGO



### Protect the Wares in Your Care—

When the consignee receives his rugs, carpets, draperies or what not and his nostrils detect that fresh, clean—yet protective—smell of

**White Tar Paper or White Tar Naphthalene**

he will know that YOU have taken proper care of his materials—he does not have to worry about holes drilled in by moths, mice, etc., while in storage or en route. Best of all, it means repeat business for you. Write today for full information.

The White Tar Company,  
56 Vesey St., New York, N. Y.

We Manufacture

**WHITE TAR PAPER**—Two grades (pine Tar and Cedar) (Pine Tar for ordinary materials—Cedar for finest fabrics). In rolls of 12 sheets. Each sheet 40 x 48 or continuous rolls from 50 yards to 1000 yards per roll.

Moth Bags—6 Sizes. Moth Balls, Crystals, Powder and Blocks, Flakes, Lavender Compound, Cedar Compound.

**WHITE TAR**



## OPPORTUNITY

Transfer and Storage men are, by training and profession, transportation and haulage experts. They have the knowledge and the experience to make them the best motor truck distributors of any body of American business men. The question arises:—Have they the courage to take advantage of an opportunity to make profits from their specialized knowledge, by engaging in a line of business which is allied to their own?

Opportunity, they say, knocks but once at every man's door. Some men are alert enough to grasp the chances that Fate offers them; to develop the start they secure by being wide-awake, and the public calls them lucky.

You hear men wailing about the "time I could have had the So-and-So Agency," bewailing the fact that he does not have it now and wondering how the "lucky" holder managed to get it.

There is not so much "luck" as judgment, perseverance, and the courage to enter a field of work which promises adequate rewards for industry. An opportunity for men who are "awake" exists now.

**We Have Openings for a Number of Transfer and Storage Men As Our Distributors—Some Territory Open Now Which May Never Be Vacant Again—Now Is Your Time.**

Address Sales Manager

**J. C. WILSON COMPANY**

Detroit, Mich.

Manufacturers of Wilson dependable Motor Trucks



### A Simple Test That Shows the Strength of Reach Furniture Van Pads

And strength counts when it comes to protecting furniture in transit.

Reach Pads are made purposely to wear. Right from the extra thick layer of cotton to the covering of very heavy ticking fabric—they're made for long and hard service.

That is why we say they are the strongest furniture van pads in the world.

We use remnant lengths only of extra heavy ticking fabric, sew them together firmly and carefully, generously fill them with soft cotton batting and reinforce them along the edges with tape. They are double stitched.

\*Remember when you buy Reach Pads you get what you pay for. All prices quoted here are for finished sizes—not cut sizes where about 15% is lost in stitching.

|              |             |
|--------------|-------------|
| 74 x 68..... | \$4.45 each |
| 52 x 68..... | 3.35 each   |
| 36 x 68..... | 2.25 each   |

Beware of the high cost of low prices.

Padded Phonograph Covers, \$8.75 each.

We also manufacture Canvas Padding, extra heavy, for lining the sides of auto trucks: Tarpaulins; plain or water-proof. Specify measurements desired. Write for prices now.

### A. L. REACH TEXTILE CO.

19-21-23 West 18th Street, New York City

### Liability or Asset?

The unguarded elevator shaft opening proves itself a heavy liability in high industrial insurance premiums, damage suits, breakage losses and laborers' dissatisfaction.

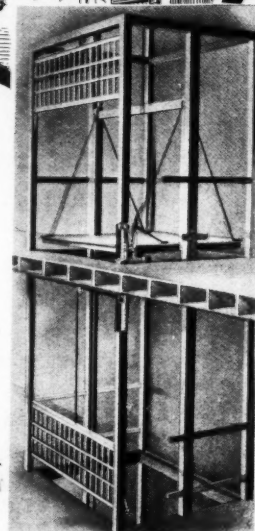
Turn liability into an asset of reduced insurance premiums, safety and employee contentment.

### RICHMOND SAFETY GATES

The "Columbia" semi-automatic gate illustrated has been proven the most practical and reliable in the market.

A full line of elevator gates, fire doors and shutters is displayed in an illustrated book sent at your request.

**Richmond Safety Gate Co.**  
Richmond Indiana



### The Economical Handling of Merchandise

is one of the greatest of industrial problems. The production of goods has been developed to the fullest—the sale of goods has been receiving the attention of business leaders for the past decade—and now comes for scientific considerations

### The Distribution of Goods

Many a big concern loses a large percentage of its profits by not being familiar with existing facilities for the transfer and storage of its shipments.

### The Transfer and Storage Directory (Third Edition)

should be in the possession of every traffic manager and shipper as well as on the desks of the officials of every storehouse and transfer company.

**\$3.00 a Copy. Postage Prepaid**

Contains data on how to compute warehouse rates according to the overhead expense, investment and income desired. How to base rates for handling commodities in and out of the warehouse.

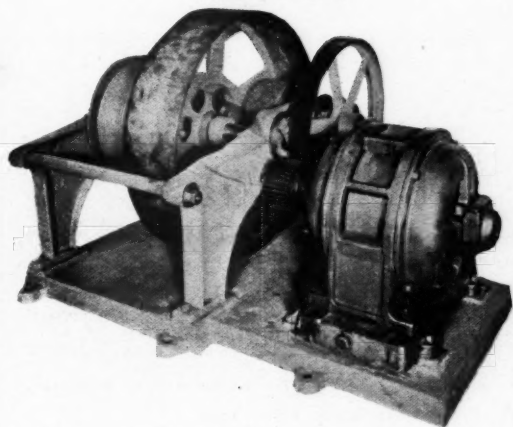
Full particulars of warehouses and transfer companies throughout the United States and Canada, with names of officers, investment, capacity, facilities, railroad connections, etc.

Full Bound in Substantial Cloth. 386 Pages. (5 x 8 in.)

### Distribution & Warehousing

239 West 39th Street, New York

**Install this Substantial, Powerful and Remarkably Efficient Whip in Your Warehouse**



It's a King—you all know the quality.

The machine is of the internal drive type—the friction wheel is driven from the inner face. This construction gives the friction wheel and driving roll a larger arc of contact, thereby increasing the driving surface, decreases the amount of slippage and a greater amount of power is transmitted to the friction wheel.

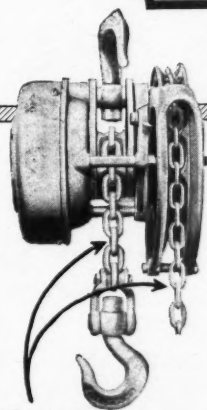
The friction roll in this machine is of extra large diameter and is built into an eccentric bearing. By the use of this bearing the wear of the friction roll can be taken up and the life of the roll is greatly lengthened.

An interesting booklet describing King Whips has been prepared for your use. Write for it today.

**H. J. & J. J. King**  
22 Sabin St., Providence, R. I.

**YALE**

**Yale Made Is Yale Marked**



**Steel Chain Another Yale Safety Factor**

**YALE** Chain Blocks have for many years been equipped with special steel chain.

Every link in every Yale chain is die formed and die forged, with the weld on the side of the link instead of at the end.

These Yale Chains have over twice the strength of ordinary iron chain. They are actually tested to three times the rated capacity of the block on which they are used.

For every job where loads must be lifted, moved or held steadily in place, the Yale Spur-Gear Block—*"From Hook to Hook a Line of Steel" is safe and satisfactory.*

**Die-formed and Die-forged Steel Chain**

*Screw-gear and Differential Chain Blocks, Electric Hoists*

Carried in stock by representative supply houses. Detailed descriptions in new Hoist Catalog—sent on request.

*For a Factory Locking Equipment Use a Yale Master Key System*

**The Yale & Towne Mfg. Co.**  
Makers of the Yale Locks  
Stamford Connecticut

**SPUR-GEARED BLOCK**



**The Jaqua-Detroit Phonograph Cover**  
made by  
**Detroit Canvas Manufacturing Company**

This Jaqua-Detroit phonograph cover, made in two sizes, No. 1 small, No. 2 large, is a heavy brown canvas cover, padded, quilted and heavily fleece lined. It has shoulder straps and under straps so one man can easily carry the machine when covered. There is a special flap at the top, with a grommet, for shipping tag.

Other Jaqua-Detroit products include:

Water proof storm covers for horses and wagons,  
Auto truck radiator and hood covers,  
Fleece lined piano covers,  
Table top pads,  
Furniture and van pads.

The Jaqua-Detroit furniture pad is a particularly economical buy at the present quotation, \$34 a dozen. Of heavy cream color drilling, sewed in squares from the center. These 60" x 72" pads will give long service and ample protection—a good buy at any time, a better buy now at this price.

Practical ideas, high quality of materials, skilled workmanship and modern manufacturing facilities are combined by the Detroit Canvas Manufacturing Company to make unexcelled products. We solicit the opportunity to demonstrate to buyers in the transfer and storage industry the money-saving ideas and practical utility built into Jaqua-Detroit goods.

**Detroit Canvas Mfg. Company**  
245-247 Larned St., East Detroit, Mich.

**JAQUA-DETROIT**  
P H O N O G R A P H C O V E R





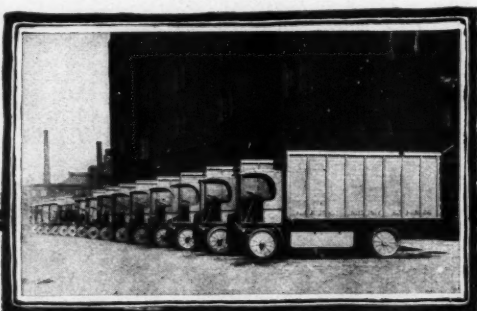
**I**NSIDE your warehouse—from roof to basement—you use Nature's cheapest motive power—gravity. Use the right motive power outdoors as well as in—deliver by Walker Electric Trucks—the most economical and reliable city transportation known.

Motive energy, in a Walker, works only while the truck is traveling—no power-waste while standing. The Walker "Balance Drive" works positively—no energy loss through reciprocation. Only ten moving parts—against a thousand more in a "gas" power plant: result—friction minimized and wear reduced. No fire risk or high insurance rate. Warehouse men keep re-ordering Walkers—we can refer you to many satisfied users.

## WALKER Electric TRUCKS LOWEST TRUCKING COST

WALKER  
VEHICLE  
COMPANY  
CHICAGO  
NEW YORK  
BOSTON  
PHILADELPHIA  
BUFFALO

AMERICA'S  
LARGEST  
MANUFACTURERS OF  
ELECTRIC  
TRUCKS &  
TRACTORS



## WAREHOUSE EQUIPMENT

### WE MEET YOUR REQUIREMENTS

IN

Furniture Pads, Canvas Covers, Piano Covers (for shipping and storage), Tarpaulins, Truck, Wagon, Horse and Talking Machine Covers.

SAXOLIN Duplex is a flexible packing, wrapping and case-lining material. Better than burlap because it is Vermin-proof, Water-proof and costs less.

Write Us Your Requirements  
So We May Quote You Prices

**The Cleveland-Akron Bag Co.**  
Cleveland, Ohio

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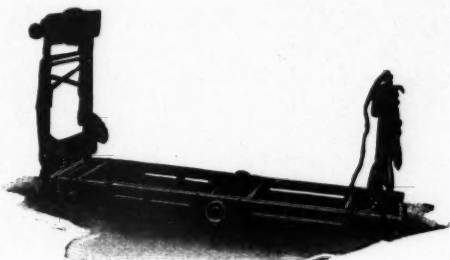
A quarterly publication containing special current information for Tire Dealers—price lists, types, sizes, etc. In constant use by practically all principal tire distributors.

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CHICAGO NEW YORK  
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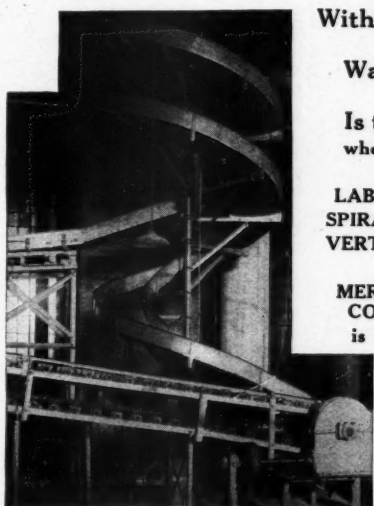
*A TRIUMPH is your*  
**BUCKEYE SILL PIANO TRUCK**

*says an owner of four of them*



**End Truck Covers  
 Straps**

**Self-Lifting Piano Truck Co.**  
 Findlay, O.



**With Help Scarce  
 AND  
 Wages High  
 NOW  
 Is the Time  
 when the need  
 for our  
 LABOR-  
 SAVING  
 SPIRAL CHUTES  
 VERTICAL LIFTS  
 AND  
 MERCHANDISE  
 CONVEYORS  
 is imperative**

Owned by  
 The Haslett  
 Warehouse  
 Co., of San  
 Francisco,  
 the develop-  
 ment of  
 handling

problems in our own fourteen general merchandise store-  
 houses has enabled us to give practical advice to ware-  
 house and terminal concerns. We are at your service.

Through long experience we have learned how to com-  
 bine every form of merchandise conveyor so as to obtain  
 the most practical results.

When no standard form of conveyor is adequate, we  
 design special machines.

When you want information on conveyors, write us.  
 We can help you.

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Factory: Madison and 20th Sts., Philadelphia, Pa.

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# GARFORD

## Clear the Terminals!

The use of motor trucks  
 at railway terminals will  
 free thousands of freight  
 cars for active use in the  
 present traffic tie-up.  
 Terminal congestion is  
 the chief cause of our  
 clogged transportation  
 system. Without distri-  
 bution business stag-  
 nates. Motor trucks can  
 and will relieve this  
 condition.

America's leading states-  
 men, financiers and rail-  
 way officials urge wider  
 use of the motor truck.

**Transportation or Stagnation?**

*Keep the Traffic Moving*

# TRUCKS

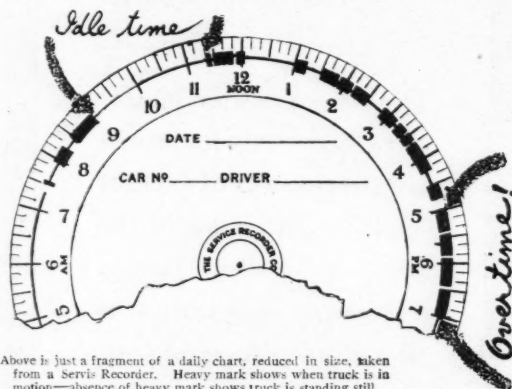
## Overtime!

is it a *habit* with your truck?

One thing is certain—if your truck wastes an hour *during* the day, it will have to take an hour *after* closing time to get a day's work done. And that is what is happening with thousands of motor trucks.

If your truck is busy during the day and still has to work overtime, then pay your overtime cheerfully, and on the basis of the chart from the *Servis Recorder*.

Don't have any more arguments about overtime. And don't have your trucks working after hours when they could finish everything *during* hours. The *Servis Recorder* will tell you on its chart the whole situation at a glance.



Above is just a fragment of a daily chart, reduced in size, taken from a *Servis Recorder*. Heavy mark shows when truck is in motion—absence of heavy mark shows truck is standing still.

Write for Booklet:

The Service Recorder Co., Cleveland, Ohio

## 20% Feed Bill Saver

This means if at present you are feeding 4 qts. to each horse per meal, by feeding crushed oats you save 2.4 qts. The yearly saving is 27 bushels, and figuring oats at 55 cents per bushel means \$15.00 saved on each horse. Just multiply this on each horse you have.

Crushed oats produce bone and muscle and keep horses in better working trim with more staying power, because Crushed Oats gain over whole oats from 15 to 25 per cent in nutriment.

The National is the most economical crusher to do this work—the power consumed costing about 10 cents per horse per month. It frees the food from foreign particles. This crusher will crack corn at the time it's crushing oats. Write for our money-saving booklet on crushed oats feeding—it's free. Write now.

National Oat and Corn Crusher

made by Excel Mfg. Co., Pottersville, N. J.

## Brown-Portable

"BUILT TO FIT THE JOB"

### MATERIALS-HANDLING-APPLIANCES

Originators of and Only Manufacturing Engineers Specializing Entirely on Sectional and Portable Machinery for the Rapid and Low Cost Handling of Bulk and Packed Commodities.

Ask for Bulletin J-45.

Brown Portable Conveying Machinery Co.

10 S. La Salle St.,  
Chicago

30 Church St.,  
New York City

## A Gifford-Wood Conveyor

In Your Warehouse  
Will Perform A Variety  
Of Services!

Having proved invaluable because of their marked superiority over the obsolete hand-to-hand method, Gifford-Wood Conveyors are recognized everywhere by leading Warehousemen as an indispensable part of their equipment.

The Gifford-Wood Conveyor provides a safe—quick—economical—means of transferring merchandise, boxes, barrels, etc., from one place to another—cuts labor and handling costs.

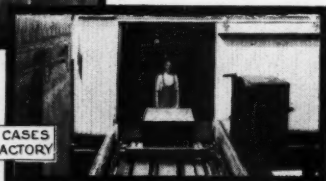
Write for our Elevator and Conveying Machinery Catalogue.



HANDLING  
BAGS IN A  
FLOUR MILL



MOVING CASES  
IN SHOE FACTORY



Mechanical  
Handling  
in all lines  
of  
Industry

**Gifford-Wood Co.**

MAIN OFFICE AND WORKS NEW YORK, BUFFALO,  
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## KILL RATS

New Way

In France the World's greatest laboratory has discovered a germ that kills rats and mice by science. Absolutely safe. Cannot harm human beings, dogs, cats, birds, chickens or pets. Quickly clears dwellings and outbuildings, with no offensive after-effects. It is called Danyysz Virus.

Free Book

Get our free book on rats and mice, telling about VIRUS and how to get some.

H. M. Virus, Ltd., 121 West 15th St., New York



## BUXKIN FURNITURE PADS

Strong Khaki Canvas, Stitched Both Ways

18 x 72 36 x 72 54 x 72 72 x 72

THE N. Y. TENT & TARPULIN CO.

Successors to Tent Dept. of Foster & Stewart Co.

388 ATLANTIC AVE.

BROOKLYN



## EXCELSIOR PACKING PADS ARE LIKE INSURANCE

**Y**OU pay only a small premium charge for the best protection obtainable. Don't think of them as an expense, consider the loss and inconvenience of claims for damage and the satisfaction of knowing that anything you ship will reach its destination exactly as it left your hands. You will incur no obligation by getting our samples and prices.

**H. W. SELLE & CO.**

Manufacturers

1000-1016 N. Halsted St., CHICAGO, ILL.

### GET OUR LIST OF USERS



Save  
Time  
and  
Labor  
Sawing  
Boxing  
and  
Crating  
Lumber

This neat, compact saw can be hung up against any convenient wall or column, thus taking up no valuable floor space.

### The Reliance MOTOR DRIVEN Swing Saw

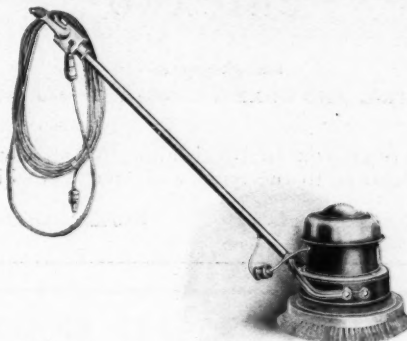
will save the time and energy of hand cutting—do the work much better and faster—and, being self contained, can be placed anywhere, regardless of power supply.

Easily installed by anybody. Direct or alternating motor. Built in three sizes, to accommodate any class of work. Tell us your requirements and we will submit proposals.

**Reno-Kaetker Electric Co.**  
4600 SPRING GROVE AVE.  
CINCINNATI, OHIO

**YOUR COMPETITOR HAS ONE**

## CONNERSVILLE



### Put Spare Floor Space to Work

Waste floor space is a loss to you. You can clean carpets, the Connersville way, in that vacant corner very profitably.

No objectionable dust is raised when you use the vacuum shampoo process. Colors are restored. Grime and stains are removed. Old carpets are made to look like new.

Connersville scrubbing machines and centrifugal type vacuum cleaners are the machines needed for the work.

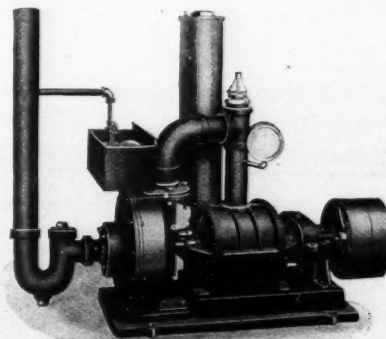
The first cost is low, high grade help is not necessary, and the profits make it worth while for you, as a Furniture Warehouseman, to clean carpets the Connersville way.

**LANDERS, FRARY & CLARK**

United Vacuum Appliance Div.—Dept. I.

**CONNERSVILLE**

**INDIANA**



## CONNERSVILLE

## G. W. Jones Lumber Co.

807 Lumber Exchange Building  
CHICAGO

Manufacturers of  
CRATING AND BOXING LUMBER OF ALL KINDS

We refer you to the leading warehouses in Chicago as to the quality of stock we ship.

Wholesale Prices

Stock Guaranteed

## Masco Vacuum Air Cooler Helps Keep Motors Cool

The Masco Vacuum Air Cooler keeps the radiator from boiling—the water at a much lower temperature, so that the motor runs 35 degrees cooler—besides warning you when the water's low.

It draws cold air into the radiator—sucks out the hot, and condenses the vapor back into water for recirculation.

You'll sell a lot of these at \$6.00 apiece and every one you sell pays you a good net profit. Write for very liberal sales proposition—dealers and jobbers, write now.

## Mayer Auto Specialty Company

Makers of Masco Ideal Splash Fender  
452 Ellicott Square Buffalo, N. Y.

## FURNITURE PADS

Made of Durable  
Colored Canvas

STOCK SIZES:

36" x 72" 50" x 72" 75" x 72"

Burlap, Waterproof Tarpaulins,  
Bags, Etc.

FULTON BAG & COTTON MILLS, Inc.

330 WYTHE AVE., BROOKLYN, N. Y.

ESTAB. 1870. Phone: Greenpoint 4200

Renew the Power and Life of  
Your Engine

by having the

## Cylinders Reground

and equipped with new

Pistons—Piston Pins—Piston Rings

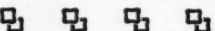
by the

## Butler Manufacturing Co.

1124 E. Georgia St., Indianapolis, Ind.

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T. L. CONDON - C. L. POST - A. M. WOLF

ENGINEERS 

Designers of Industrial Buildings

Industrial - Architectural - Structural - Mechanical - Electrical

1433 MONADNOCK BLDG.  CHICAGO, ILL.

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## RECOOPERING THE SIGNODE WAY

Saves Time, Labor and Material Cost.

Over One Hundred Million Boxes, Bales and Bundles have been Strapped, Sealed and Shipped the Signode Way.

Full Information by Return Mail

 SIGNODE SYSTEM INC.

564 W. ADAMS ST., CHICAGO

BOSTON NEW YORK PHILADELPHIA SAN FRANCISCO  
ATLANTA TORONTO

1½, 2, 3½ and 5 Ton WORM DRIVE Models

Write for full information

SELDEN TRUCK CORPORATION,  
ROCHESTER, N. Y., U. S. A.

**Selden** Motor Trucks

THE SUBSCRIPTION PRICE OF

## Distribution & Warehousing

IS

**\$2.00 A YEAR**

(\$2.50 WEST OF THE MISSISSIPPI)

The Warehouseman who does not find ideas and suggestions in any one issue which will make or save him a hundred times that amount is either ready for the millennium or is not looking for opportunities.



## If you don't find what you want here, your advertisement here will find it for you

This Exchange section serves a real purpose in the industry by affording a central market place for the disposing of equipment no longer needed, and the securing of special apparatus at bargain prices. If you have any equipment for sale or wish to sell your business, this section is the logical place to advertise. All advertisements in this section will be accepted at a flat rate of three cents per word for each insertion.

**WE WANT TO SPEND \$25,000 CASH** for unclaimed merchandise left in storage. We will buy for spot cash: Novelties of all kinds, household specialties, toys, knick-knacks, books, post cards, jewelry, pictures, patented articles, "fool" inventions. Anything of which there is a large quantity. Send sample and say how many you have. Our spot cash offer by return. Address Fantus Brothers, 525 So. Dearborn St., Chicago, Ill.

**FOR SALE**—An unusual opportunity to get into the household goods warehousing business in one of our most progressive cities. This business has been established over twenty years and is the largest in this city of over 250,000 population. It is the most uniquely situated of any warehouse in any city in the United States. \$50,000.00 will buy the transfer equipment and storage business. Present owners will lease buildings on a reasonable basis, comprising 125,000 square feet of warehouse space and garage adjoining of 12,000 square feet. For full particulars, address Box 156, DISTRIBUTION & WAREHOUSING, 239 West 39th St., New York City.

**POSITIONS OPEN** for two or three experienced warehousemen in furniture warehouses in New York. Experience neces-

sary. Salaries \$35.00 to \$45.00 per week. Address P. O. Box 165, DISTRIBUTION & WAREHOUSING, 239 West 39th St., New York City.

**WILL BUY DEAD STORAGE** of any kind and in any large quantity. It does not matter what unclaimed merchandise you have, if only you are willing to sell it.

Write us to-day mentioning quantity and forwarding samples if possible, and we will do the rest. **ABORN PRODUCTS COMPANY**, 310-312 Church St., New York City.

**FOR SALE**—Transfer and storage business. Six trucks and one warehouse full to capacity in wonderful sunny California. Owner wanting to retire. \$15,000 buys the business. Address P. O. Box 160, DISTRIBUTION & WAREHOUSING, New York City.

**EXECUTIVE**, experienced in warehousing as applied to chain grocery stores, wishes to make a change. Would like an interview with object of obtaining executive manager's position. Salary \$3,600.00 with advancement guaranteed according to ability. Address P. O. Box 170, DISTRIBUTION & WAREHOUSING, 239 West 39th St., New York City.



Save Money, Time and Labor by Using

### "THE HOLYOKE" Transfer Truck

One Man and this truck performs the work of Four Men.

Various models to suit every variety of work.

All strongly built and sold under a liberal guarantee

Write for Circular B-1

#### Holyoke Truck Company

Main Office and Factory

105 Race Street, HOLYOKE, MASS.

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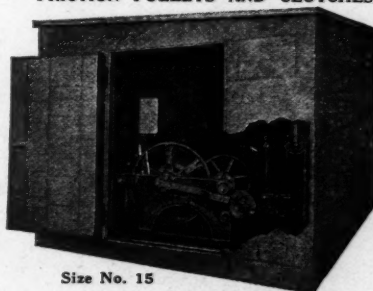
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### Mercury Tractors

AND

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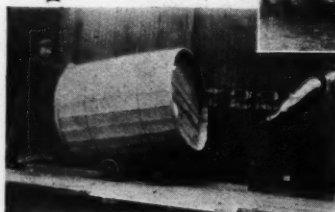
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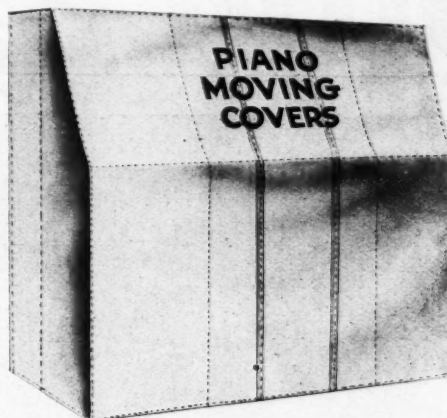
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**Furniture Loading Pads**

**TABLE TOP COVERS  
VICTROLA COVERS  
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## BUILT FOR BUSINESS



**I**N a run from Los Angeles to El Centro via San Diego with a 3060 pound load, it made 267 miles in 8 hours 26 minutes—an average speed of 34 miles per hour. It went the full distance without a stop and the speed limit was observed in all towns in transit.

Another Limited running from New Orleans to Baton Rouge, 124.6 miles, carrying 3750 pounds, made the distance in 6 hours, 55 minutes running time.



**DUPLEX**  
FOR BUSINESS

### The Only Motor Truck With All These New Features In It

*Read These Features—Think What They Mean—And You Will Agree That Here Is a Truck That Must Be a Wonderfully Good Investment*

**Y**OU know what's the need of the hour in trucks. If you have been a truck user for any length of time you have probably had some experiences that have given you an entirely new angle on motor trucks and their value.

You don't need to be told of the shortcomings of the old truck standards, but you probably are tremendously interested in learning about the real features of a truck that you can depend on.

It is on this basis of honest value to you and to every other user that the Duplex Limited is made and sold.

Do you know that the Duplex Limited is probably the fastest and most rugged truck of its size and capacity in America?

Do not make the mistake of thinking that this truck is merely a speed truck. It isn't—it's a strong, rugged truck built to carry 3000 to 5000 pounds and it gets its speed from motor power—not gear ratio.

Built and designed for pneumatic tires—standard tread—it takes roads as they come and averages express train speed. It has probably the most perfect balance ever developed in a truck. Friction is saved everywhere possible by using ball bearings throughout. Scientific tests show that it takes 29 times less power to move a given load when ball bearings are used as against any other type. This wonderful balance and almost frictionless running makes a big saving in gasoline.

You get further saving in gasoline because the truck has complete electric equipment, including starter. That means that the driver will shut off the motor when the truck is idle and he will save you from 2 to 4 gallons a day that way alone.

The patented Duplex Spring Suspension for the radiator allows ¼-inch sideways and 1-inch up and down movement before the radiator touches anything solid.

This eliminates at one stroke the greatest single source of radiator leakage and consequent motor damage from overheating.

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See the Duplex dealer near you—he will give you any demonstration you want and let the truck speak for itself. He is a responsible man—he will not exaggerate and he stands ready to back up, as we do, every truck that bears the name "Duplex." Get the facts about the Duplex Limited.

Write us direct for details about the two wonderful runs of the Limited and also for free copy of "DUPLEX DOINGS," the Truck Users' Magazine.

*For heavy duty, the Duplex 4-Wheel Drive is everywhere admitted to be in a class by itself. Power in every wheel, 3½ tons capacity—it keeps going as long as the wheels touch ground and for heavy work is without question the most economical truck in America.*

## Duplex Truck Company

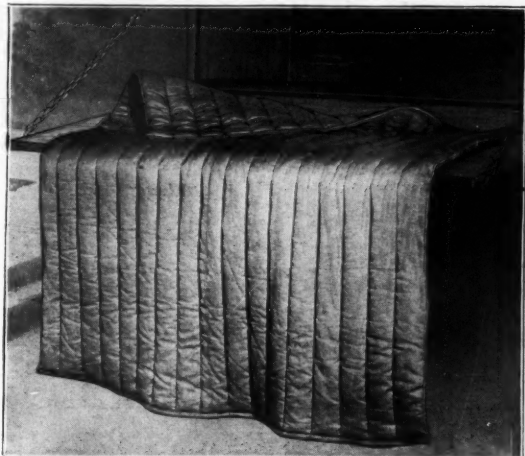
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# SPECIAL

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Khaki Brown for Service

### Maish Quality Wagon Pads

| Size         | Cut Size of Cloth | Price  |
|--------------|-------------------|--------|
| #10 (Small)  | 36x72             | \$2.10 |
| #20 (Medium) | 54x72             | 2.74   |
| #30 (Large)  | 72x80             | 3.90   |

F. O. B. Cincinnati

These prices cannot be duplicated after this Special Sale.

**A**N EXCEPTIONAL opportunity to buy wagon pads of the very highest quality at prices that are surprisingly low. If you act quickly, you get a wonderful bargain. This is why:

Recently a dealer urgently in need of ready money sold us a select stock of drills, used for covering, at a sacrifice price. We have used these drills in making up a special stock of Maish Quality Wagon Pads. Our production cost on same was much less than usual—and you will see from the prices we quote above that we are willing to **share the benefit with you** in a substantial way.

The drills used in this lot are extra heavy, making up Wagon Pads of a very superior quality. Furthermore, these drills are extra wide, which means that finished sizes of this stock of Wagon Pads will be much larger than is usual.

### CONDITIONS OF THIS SALE

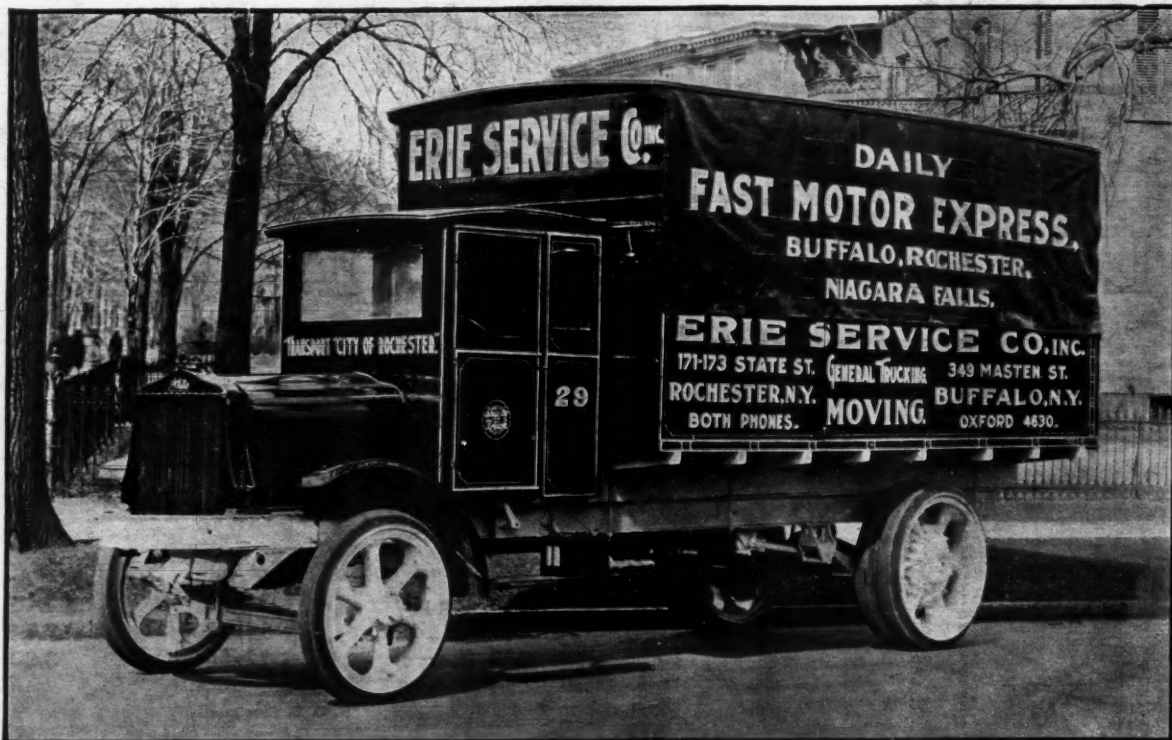
Orders will be filled in rotation as received until this particular lot is exhausted. These special low prices are limited strictly to the stock above referred to and *cannot be duplicated after this sale*. If you need Wagon Pads, this is your tip to buy now.

**The Chas. A. Maish Co.**

Makers of the world-famous MAISH COMFORTS

**Cincinnati, O.**

1129 Bank Street



One of a fleet of 19 White Trucks owned by Erie Service Co., Buffalo, N. Y.

## "Cost Less to Operate Whites"

**T**HE Erie Service Company operates a fleet of 28 motor trucks in intercity transportation within a 78-mile radius of Buffalo. Of this fleet, 19 units are Whites, and the remaining nine will be replaced by Whites as soon as arrangements can be made.

"We have found that our work, which requires both dependable and economical transportation, can best be handled by Whites," says G. Chester Hillig, general manager. "We can run our 5-ton Whites for

less than we can operate 3-ton trucks of other makes, and we have found that Whites are the only make of truck that will consistently enable us to live up to our guarantee of over-night delivery between Buffalo and Rochester."

More than 5,000 White Trucks are in service of concerns in the motor transportation field. These owners buy Whites because of their high earning power. Cost records show that Whites not only do the most work, but they do it for the least money.

THE WHITE COMPANY  
CLEVELAND

# White Trucks

